

**Meeting of the Federal Open Market Committee on
May 6, 2003**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, May 6, 2003, at 9:00 a.m. Those present were the following:

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

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

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

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

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

Mr. Kos, Manager, System Open Market Account

Messrs. Ettin and Madigan, Deputy Directors, Divisions of Research and Statistics and Monetary Affairs respectively, Board of Governors

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

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

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

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

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

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

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

**Transcript of the Federal Open Market Committee Meeting on
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CHAIRMAN GREENSPAN. Who would like to move approval of the minutes of March 18?

VICE CHAIRMAN MCDONOUGH. So moved.

CHAIRMAN GREENSPAN. Approved without objection. Dino Kos, you have the floor.

MR. KOS.¹ Thank you, Mr. Chairman. I'll be referring to the charts that were distributed a short time ago. Since the last Committee meeting, markets have been characterized by a mixture of uncertainty about—among other things—the outlook for the economy, residual geopolitical risks, and SARS. Simultaneously, the degree of risk aversion decreased and spreads narrowed, volatilities declined or stayed at low levels, equities rallied in most markets, and a consistent theme among investors was the search for yield.

The top panel on the first page graphs the U.S. dollar three-month Libor deposit rate in black and the three-month deposit rate three, six, and nine months forward in the dashed red lines. Since your last meeting, forward rates have traded in fairly narrow ranges, as markets were pushed and pulled with conflicting news—the mostly weak economic data and a corporate earnings season that, while unspectacular, did not come close to many of the most dire expectations in the markets. Forward curves and futures prices are still pricing in another ease in policy at some point, though those same curves suggest that a tightening cycle will follow shortly thereafter. Of course, this pattern of expecting lower rates to be followed by higher rates some months later has persisted for quite some time now.

As shown in the middle two panels, two- and ten-year Treasury yields also have moved in a fairly narrow range. One factor that did not seem to affect prices and yields was last week's record refunding announcement. The Treasury will auction \$58 billion of three-, five-, and ten-year notes in the next few days, with almost all of that bringing in new cash. Further, all forecasts of future deficits continue to rise. While analysts have commented about the risks that the increased supply poses, those worries have not yet shown through to yields, though perhaps they will in time as the competition for funds increases. Two possible reasons for the lack of reaction were cited: First, worries about future supply are already reflected at the long end of the curve and hence partly explain the steepness of the curve; and second the decrease in recent quarters in private-sector issuance is allowing the Treasury to borrow what it needs without bidding up rates.

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

The bottom panel graphs the investment-grade spread, which has continued to fall. If one excludes some very large issuers such as auto companies that have special stories surrounding them, the remainder of the index is trading near spring 1998 levels. Swap spreads, in fact, are already back to those levels. Part of this narrowing probably is a correction from what are now viewed to have been extreme levels in the autumn of 2002, when corporate governance scares were peaking. Part of the narrowing is simply due to supply and demand. Inflows continue to come into bond funds and need to be invested.

On the supply side, although issuance did tick up in late January and February, it fell again as the war approached, and it has stayed low since then. Dealers note that corporations are using free cash flow and what little corporate issuance there has been to repay debt and de-lever their balance sheets. This helps to explain the credit quality improvement, though it also implies that less is going into investment than would normally be the case.

Meanwhile on the demand side, investors have pushed out the maturity and credit risk curves in the search for higher yields. The bottom right panel graphs the narrowing of high-yield and emerging-market spreads. Funds specializing in both asset classes have had inflows, and with only a limited supply coming to the market, the competition has been intense and spreads have narrowed sharply. Just to take one example, Brazil issued a \$1 billion five-year global bond that was six times oversubscribed. A week ago the bond was issued to yield 10.7 percent, and it has rallied in the week since then. It now yields 9.8 percent. The issue also included a collective action clause, which did not appear to affect demand. The Brazilian real, Mexican peso, and South African rand were among the currencies that benefited from investors' search for higher yielding currencies and asset markets.

Consistent with the narrowing of spreads and less risk aversion in recent weeks, implied volatilities have decreased or stayed at relatively low levels. Page 2 graphs long-term implied volatilities on the S&P 100, the two main exchange rate pairs, and the ten-year Treasury futures since January 2000. The better performance of U.S. equity markets in recent weeks—the S&P 500, for example, is up 15 percent—has coincided with the fall in implied vols. As shown in the top panel, which depicts the S&P 100 volatility index, that measure of equity volatility is back to below the 25 percent level for the first time since corporate governance worries heightened after the WorldCom collapse. Currency volatilities continued to trade in well-worn ranges, near the 10 percent level that has prevailed for some time. These volatility levels have been maintained both during the appreciation of the dollar in the beginning of the period and during the more recent period of dollar depreciation. The implied volatilities in the ten-year Treasury futures contract have continued to ebb in recent weeks to levels observed in the first half of 2001. Part of that recent falloff in volatility may also be due to the decline in the Mortgage Bankers Association's Refinancing Index, as prepayments have slowed. That also may have lessened the demand for hedging by mortgage investors and corporate treasurers.

Turning to Europe, the top panel on page 3 graphs the Libor fixing for euro three-month deposits in black and the implied rates three, six, and nine months forward in green. The forward rates continue to trade below the cash rate and market participants expect further easing from the ECB, as forecasts for European growth are still being trimmed. In the middle panel, credit spreads in the euro area continue to narrow as well. In particular, the lower end of the investment-grade universe has outperformed the rest. But unlike the case in the United States, issuance actually picked up early this year, as shown in the chart at the bottom left, so supply there is holding up. One possibility is that European companies are now going through some of the same dynamics that U.S. companies went through in 2001 and 2002, when they issued debt heavily in order to refinance and restructure debt and to extend the term of maturing commercial paper.

In the foreign exchange markets, the euro has continued to rise past 112 and is now at the 113 level against the dollar—its strongest level since February 1999, which was roughly six weeks after the euro's launch. Investors shifting assets into the euro area reportedly include central banks, Japanese insurance and pension companies, and European institutional investors who have preferred to keep funds at home rather than move them overseas. Although we don't think of the euro as a high-yielding currency per se, both short- and long-term rates are meaningfully higher than those for the two G-3 counterpart currencies.

Turning to page 4, Japanese markets show no signs that the deflationary pressures in that country are abating. The banking situation continues to pose challenges for Japanese policymakers, and the recent declines in Japanese stocks have accentuated those worries. The Nikkei stock index fell below 8,000 during the intermeeting period for the first time since 1983. This has again raised talk in Japanese policy circles about measures such as so-called price-keeping operations to stem the declines in equity prices and hence conserve capital resources of the banks and insurers. Unlike most other major equity markets, the Nikkei did not rally in mid-March. That divergence from other equity markets is depicted in the top panel. The S&P and DAX, to take just two examples, came off their lows rather sharply, whereas the Nikkei continued its steady decline toward and then below the 8,000 level. Today it is just above that level. The Japanese bond markets also have been gloomy, as shown in the middle panel. The ten-year yield is trading at about 61 or 62 basis points, and the yield on the twenty-year bond is at 94 basis points. Among benchmark issues, only the thirty-year yield, trading at 1.06 percent, has a positive integer before the decimal point, though not by very much.

The BOJ's policy stance has pushed investors out on the yield curve and to some degree into private-sector and foreign assets. The right middle panel shows the recent narrowing of private-sector spreads in Japan, which is not unlike the patterns observed in dollar and euro area fixed income markets. But let me note three points of caution. First, as we know, companies in Japan rely more on bank financing; bond market issuance is low compared with both their U.S. and European counterparts. Second, the data are poor. But net new issuance is probably flat or perhaps even

negative in the lower-rated segments, which would help to explain some of the spread compression. Third, spreads widened substantially in late 2001 when some fund managers were faced with large losses, and the ensuing liquidation widened spreads—especially for lower-rated paper. Those spreads are only now reverting to the levels we saw in the summer of 2001.

The noisy chart at the bottom left graphs the TOPIX bank sub-index and the share prices of the four major Japanese banks, all of which are down substantially as the prospect for improvement in their business recedes. Mizuho, for example, reported a \$19 billion loss a week ago. Ironically, the spreads on Japanese bank debt have nevertheless narrowed during 2003. The bottom right panel graphs the spread for each of the four major banks between their five-year senior debt and the five-year JGB yield. I would make two points. First, all the spreads have narrowed and are converging, suggesting little in the way of differentiation among the banks—or at least less than had been the case some months ago. Second, these spreads obviously represent very low absolute yields. With the five-year JGB yield itself at 21 basis points today, a spread of 10 basis points on Sumitomo's debt, for example, means that the bank is able to sell five-year debt at 31 basis points.

Moving to the next page, one of the stars in the currency market has been the Canadian dollar. In recent trading sessions the Canadian dollar has risen above 70 cents and is now trading at its strongest level since 1997. Among the reasons for the Canadian dollar's performance are Canada's strong economic performance, higher yields, less overcapacity in Canadian industry, a large energy sector at a time when prices have generally been high, and the Bank of Canada's move to tighten monetary policy. Canadian ten-year yields are about 1 percentage point higher than those on comparable U.S. instruments; and at the short end, Canadian interest rates are about 2 percentage points higher. The divergence in policy has also had a different effect on the yield curve. The middle panel graphs the two-to-ten-year U.S. Treasury curve in blue and the comparable data for Canada in red. While the U.S. curve has been steep at between 220 to 240 basis points all year, the Canadian curve has actually flattened by about 60 basis points and is currently only half as steep as the U.S. curve. The World Health Organization's decision to issue a travel advisory for Toronto had periodic but only transient effects on Canadian markets.

The Hong Kong and Chinese markets, on the other hand, had at times a more pronounced reaction to SARS-related news but perhaps less than one might have expected given the sheer volume of coverage the story received. At the bottom left in blue is a graph of the Hong Kong dollar, which is fixed at 7.8 to the dollar. The one-year forward rate moved upward in mid- to late April to 7.83 but since then has eased back somewhat. At the bottom right, China's spot exchange rate is depicted in blue and the implied one-year renminbi nondeliverable forward rate in red. The discount on the renminbi has narrowed somewhat, but all in all the reaction was fairly modest. Equities in both Hong Kong and China, however, did fall, although again perhaps not as dramatically as one might have expected.

Mr. Chairman, there were no foreign operations in the intermeeting period. I will need a vote on domestic operations. And I'd be happy to answer any questions.

CHAIRMAN GREENSPAN. A collective action clause (CAC) may be in the gazillion new issuances that follow the Mexican and Brazilian ones, both of which apparently required very little if any premium in the marketplace to obtain the CAC. Is there any evidence among emerging-country borrowers that use of the CAC will now spread significantly? It obviously provides greater flexibility in negotiating.

MR. KOS. I'm not an expert in that particular area. Certainly some of the stigma associated with the CAC will be taken away. One of the concerns that officials had worried about was that there would be some stigma associated with being first off the block with a CAC. With Mexico and Brazil having moved to include CACs, there may be less of a stigma so it may be easier to get them in. But I wouldn't want to make a forecast that they will become a routine part of such contracts.

VICE CHAIRMAN MCDONOUGH. May I make a comment? I think the general Street talk in New York is that, since the Mexicans have been the most vehemently opposed to CACs, their going first was rather statesmanlike—especially since they didn't pay anything for including the CAC. The Brazilians went next, but there's a big question as to whether less high quality borrowers would not have to pay a premium for the CAC. I think the real answer is that we don't know yet, though it's clearly the question.

CHAIRMAN GREENSPAN. Talking about Brazilian debt as high quality is a bit of a change.

MR. FERGUSON. Could I add one other point based on the work that I've done on this? Two other countries have been mentioned in this regard, and one is Korea, which for geopolitical reasons obviously is not going to go to the market any time soon. But they have been among the

emerging-market countries that were most supportive of the CAC, so the expectation is that when they come to market they will adopt the CAC. The other country that has been active in these discussions is South Africa, which had been a little more negative about the CAC, I think. But there were many people who thought that, with the Mexicans having gone ahead, the resistance in South Africa might change as well. So those two countries are ones that need to be watched. But I think Bill is certainly right that it's just not clear yet how all this is going to sort out.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. I have a question about the construction of one of the graphs on page 3. At the bottom left you show the dollar value of the euro issues. Are those converted at the exchange rate of the month in question?

MR. KOS. I believe so, yes.

MR. POOLE. If we look at July '01, for example, the height of that bar is about the same as the previous bar, which I guess is for April '01. But in fact the dollar price of the euro was quite different at those times. So if you depicted the values in euros, the bars on the right-hand side would not look quite so high relative to the others, right? That would mean that the most recent bars would be converted at \$1.12 or \$1.11 or something like that.

MR. KOS. That's true, yes.

MR. POOLE. And the bars some time back would be converted at \$1.03 or something like that. I don't know exactly—my memory of those rates is not that solid. But the point is—

CHAIRMAN GREENSPAN. The swings are really quite large, though.

MR. POOLE. Oh, I know they are. I'm just saying that it might be more useful for our purposes not to plot the changed dollar price of the euro with the actual euro issuance.

Presenting that in euro terms might be a little clearer for our purposes.

MR. KOS. Yes, I think for us it was a question of data that were available on short notice. But I think you're right that that would be a better way of presenting it.

MR. POOLE. Thank you.

CHAIRMAN GREENSPAN. Further questions for Dino? I need a vote.

VICE CHAIRMAN MCDONOUGH. Move approval of domestic operations.

CHAIRMAN GREENSPAN. Without objection they are approved. Dino, you want to discuss the Canadian and Mexican swap renewals?

MR. KOS. Yes. It's May, which means that it's time to take up the renewal of those swaps. They expire in mid-December; but because of the six-month notice that would have to be given if the Committee chose not to renew them, this is the proper meeting to vote on renewal. I sent out a short memo on this last week, and my recommendation is that the Committee renew the NAFTA swap lines with Mexico and Canada.

CHAIRMAN GREENSPAN. Questions?

VICE CHAIRMAN MCDONOUGH. Move approval.

SPEAKER(?). Second.

CHAIRMAN GREENSPAN. Approval has been moved. All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. All opposed, say "no."

MR. BROADDUS. No.

CHAIRMAN GREENSPAN. We now move on to the economic situation. Dave Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. There has clearly been a narrowing of uncertainties surrounding the outlook as well as a considerable amount of good news for the economy since the March Greenbook was completed. The successful and expeditious completion of the war in Iraq has alleviated some of the pressing concerns that had been weighing on participants in the energy and financial markets. Indeed, with OPEC production higher, remarkably little damage to oil fields in Iraq and, as yet, few signs of negative political spillovers elsewhere in the region, oil prices have tumbled. The spot price of West Texas Intermediate crude oil is expected to average about \$9 per barrel lower in the current quarter than we had anticipated in our previous forecast.

In financial markets, stock prices began to move noticeably higher just as we were completing our March projection. The lifting of war-related uncertainties and the better-than-expected earnings reports for the first quarter boosted equity prices about 13 percent above the level assumed in our last projection. Risk spreads on corporate bonds have narrowed as well, especially for lower-tier firms. Households too seem to be feeling better. Consumer confidence has rebounded in recent weeks, retracing much of the decline that had occurred since last fall. Finally, one of the key upside risks to the projection that we had highlighted earlier appears to have materialized, as the defense spending implied by the recently enacted supplemental is considerably more than we had incorporated in our previous projection.

So with all of that apparent good news, our forecast might come as something of a disappointment. We have revised down the growth of real GDP throughout 2003, and the 2.8 percent increase projected for the year is nearly ½ percentage point less than in the March Greenbook. To be sure, greater stimulus from the factors that I just mentioned does produce more-rapid growth next year. But even with the sharper pickup in activity that eventually develops in our forecast, the level of real GDP is lower and the GDP gap higher, on average, in 2004 than in our previous projection.

Our principal motivation for this downward revision has been a fairly steady drumbeat of negative news on the real economy. To start, the spending data have been coming in somewhat weaker than we had anticipated in March. Consumption and investment taken together rose just 1½ percent at an annual rate in the first quarter, more than ¼ percentage point slower than in our last projection. Moreover, at least in the household sector, we aren't entering the second quarter with much momentum. Outside of motor vehicles, consumer spending has been relatively flat in recent months. Sales of new motor vehicles improved to 16.4 million units at an annual rate in April, up from a 16 million unit pace in March. But that incentive-stimulated increase was aimed at alleviating the inventory problems that had developed this winter, and the cutbacks in production scheduled by the manufacturers will continue to be a drag on aggregate activity in the current quarter. Moreover, our

business contacts in this industry report that the response to the recent boost to incentives has, if anything, been disappointing. Housing activity has not been as buoyant as we had expected. Starts and permits have had a softer tone, and we now expect a flattening out in this sector in coming months instead of modest gains.

Business spending also has presented some downside surprises. On net, the readings on orders and shipments of capital goods in February and March were below those anticipated in our previous forecast. In the high-tech area, outlays for communications equipment have shown notable strength of late, but computer spending is growing less vigorously than we had expected. Outside of high-tech, a projected increase in current-quarter equipment spending does not appear sufficient to reverse a now larger estimated decline in the first quarter.

The mildly negative innovations in the spending data, taken by themselves, would not have justified the size of the downward adjustments that we have made to private demand for the remainder of the year. Our thinking about the underlying strength of the economy was more heavily influenced by the surprisingly weak recent readings on the labor market and industrial activity. Private payrolls have been contracting at an average monthly rate of 85,000 since the turn of the year, and with initial claims for unemployment insurance averaging close to 450,000 in recent weeks, there are few signs that businesses have, as yet, stopped shedding workers. Moreover, the employment decline and the sharp drop in the workweek in April point to another contraction in hours worked this quarter. Perhaps this is more good news on productivity—and quite likely it is. But I don't think that's the whole story. We are now expecting a decline in total industrial production of $\frac{1}{2}$ percent in April and a drop in the manufacturing component of about $\frac{3}{4}$ percent. Activity in the factory sector has generally been contracting since the fall. That weak picture seems to line up very well with negative readings from purchasing managers and the continuing downbeat tenor of the reports that we have received from business contacts.

It is, of course, possible that we have overreacted to the incoming data. I should stress that we are still working with readings on the economy that, for the most part, were taken before or during the war. We have interpreted the greater weakness in that information as suggesting that underlying activity has been softer than we had earlier estimated. But we can't confidently rule out that the war-related restraints on the economy were more intense than we have been allowing for. Beyond the readings from commodity and financial markets, we still know very little about the postwar economy. In brief, we have received more favorable readings on consumer confidence and chain-store sales and less favorable readings from initial claims.

As I noted at the outset, defense spending is one element of final demand that is likely to be considerably stronger than was anticipated in our previous forecast. Indeed, our projected increase in outlays for defense now accounts for more than half of the GDP growth that we are projecting for the current quarter. That made us nervous enough to canvas our brothers and sisters in the forecasting community, both inside and outside government. We got pretty much the same answer from

everybody: “Gee, that’s interesting; we haven’t really thought much about it yet.” Armed with that helpful guidance, we tried our best to steer a balanced course. To the upside of our forecast, the CBO is estimating noticeably higher defense spending for fiscal year 2003 than we have incorporated in this forecast. With only two quarters remaining in the fiscal year, their figures imply some whopping increases in Q2 and Q3. To the downside, OMB’s latest take on Iraq-related defense spending is about as far below our forecast as CBO’s is above. But even the OMB figure is consistent with a somewhat faster spendout of recently enacted budget authority than was observed after the Gulf War. The bottom line is that the confidence interval around this feature of our forecast is very wide.

Although our revisions to private and government spending, on net, resulted in somewhat slower growth in real GDP, we continue to show growth picking up in the second half. The basic logic of that forecast remains the same as in the last Greenbook—forces are in place that will work in concert to produce a pickup in real activity over the second half of this year. Accommodative monetary policy, another dose of fiscal stimulus, waning negative wealth effects, improving consumer and business confidence, and lean inventories are the key ingredients in our forecast of reacceleration in spending and production.

Vincent remarked to me after the last meeting that President Minehan’s description of all the things that had to go just right to get the staff forecast had made me sound a bit like the guy on the Ed Sullivan show who would come out and start spinning ever greater numbers of plates on the end of sticks. As more plates were added to the mix, each one had to be spun with precision and speed to maintain the balance of the entire delicate construction. While I am reluctant to endorse this characterization of the forecast, I will admit that my arms have been getting a bit tired waiting for a big finale. [Laughter]

Obviously, there remain serious risks to both the timing and magnitude of the acceleration in real activity that we are projecting. The recent gains in equity markets and declines in risk spreads could be signaling that a stronger-than-expected rebound is in the offing. As you know, we have made much of gloomy sentiment and heightened caution as factors that have retarded business spending over the past year or so. But it would be a mistake to equate caution on the part of businesses with inaction. In fact, they appear to have been hard at work. Balance sheets have been strengthened, aided importantly by an environment of low interest rates. Firms have become leaner through workforce reductions, reorganizations, and more-effective utilization of their existing capital stock. And with a few exceptions, businesses have kept inventories very lean in relation to sales. These adjustments could be setting the stage for a more-vigorous expansion ahead.

But there also remain ample grounds for skepticism about the reacceleration in activity that we are projecting to occur in the second half. We continue to believe that unusual forces have been holding back investment spending and that these forces will gradually dissipate. It is possible that this story is just wrong. Perhaps

investment has been weak because there are relatively few profitable investment projects available. In other words, perhaps our model is misspecified, and the recent pace of investment spending reflects fundamentals that are less favorable than we recognize. In this case, the acceleration in equipment spending would likely be less impressive than anticipated in our forecast. There are risks to household spending as well. As we discussed at the last meeting, the personal saving rate remains well below its long-run equilibrium. We have been comfortable that households are making adjustments to consumption and saving of about the size and on roughly the time line anticipated by our models. Still, we cannot rule out the possibility of a more abrupt upward movement in the saving rate—associated perhaps with heightened job insecurity should the labor market remain in the doldrums. This too would produce a more muted pickup in activity than we are projecting.

Even if we have the basic elements of the reacceleration of real activity about right, considerable uncertainty remains about the timing of the step-up in growth. The process of repair and recovery from the bursting of the asset bubble and the myriad other shocks that have hit the economy in the past few years could take longer than we are anticipating. At this point, timing does matter. Core consumer price inflation has been moving lower in recent quarters, and in our forecast most major measures are expected to move into a range that encompasses zero inflation, once allowance is made for likely measurement error. Any serious delay in the recovery or shortfall in its magnitude would imply a larger output gap, at least for a time, and by our analysis would result in an even lower inflation rate. As you know, for this round, we updated the calculations for the probability of deflation that we presented last December. Because the baseline forecasts for both output and inflation have been revised down since then, we now estimate that the probability of deflation—defined as core PCE price inflation falling below $\frac{1}{2}$ percent by the end of 2004—has risen from about 28 percent to about 35 percent. I'd take these figures with a grain of salt. But it doesn't take complex stochastic simulations to recognize that, with inflation this low, any reasonable confidence interval would include a sizable probability that the aggregate price level could fall. Karen will now continue our presentation.

MS. JOHNSON. In constructing our outlook for the rest of the world this time, the task we faced was basically the same one we confront each Greenbook: We needed to determine to what extent the information we had received over the intermeeting period was consistent with our forecast in March and to what extent it represented unexpected developments that appropriately required some adjustments to our projection for this year and next. Although the task was familiar and routine, the challenge was particularly difficult this time as so much of what has happened since your meeting in March was driven by the extraordinary events in Iraq. For the last three to four weeks, since the phase of major hostilities in Iraq wound down, global financial markets appear to have responded to fundamental economic news more than was the case earlier in the intermeeting period. Nevertheless, we have little hard evidence on developments in the real sectors of foreign economies since the most acute geopolitical risks substantially abated.

Developments in global oil markets are the most straightforward to evaluate. Relative to our forecast in the March Greenbook, we are now projecting the average spot price for WTI oil in the current quarter to be \$9 lower. The same comparison for the fourth quarter of next year yields a difference of less than \$1. Thus events have largely pulled forward in time a reduction in world oil prices that had been expected to occur but more slowly. The most direct effect of that change is on the total cost of imported oil for most countries, including our own, and we have visibly reduced the U.S. external deficit this year and next year accordingly. For major U.S. trading partners who are also oil exporters, such as Mexico, we have incorporated a negative hit to their trade balance and to their aggregate income.

The indirect effects of the lower path for global oil prices are less straightforward. We judge that confidence on the part of consumers and businesses abroad should be boosted by the rapid fall in oil prices and the consequent benefit to real disposable income and business costs. That difference should be greatest in the near term. To date we have limited evidence on confidence abroad since the end of hostilities, and what we do have presents a somewhat mixed picture. On balance, we saw the lower oil prices as a moderate positive for consumer and business spending abroad, particularly for the rest of this year.

The foreign exchange value of the dollar fluctuated somewhat widely in the days just before and following your March meeting, mostly in response to developments within Iraq. Since early April, however, the dollar has trended down on balance and in terms of the index of major foreign currencies has recently moved below its March 12 low point. No doubt more by luck than any forecasting skill we might have, fluctuation of the dollar-euro rate left that pair about in line with the path we wrote down in March. We have adjusted down the U.S. dollar in terms of the Canadian dollar and the Mexican peso. In contrast, we have adjusted the dollar up in terms of the yen. Taken together, these changes imply a slightly weaker level for the real value of the dollar in terms of our broad index of trading-partner currencies, but the rate of change from here through the end of the forecast period is projected to be about the same as in our previous forecast.

As in the United States, stock prices in most major foreign economies have rallied in recent weeks. Equity prices are now up for the year in many European markets. The average across Europe represented by the DJ Euro Stoxx price index is back to no net change for the year, after reaching a low of 20 percent below its late December level on March 12. Stock prices are up on balance this year in major Latin American emerging-market countries also, including Mexico and Brazil. For those countries, EMBI+ spreads on dollar bond rates are down substantially as well. We interpret these favorable developments in financial markets as consistent with an improvement in confidence over time and a strengthening of real GDP growth. For now we judge these developments to be in line with the pace of strengthening that we projected in March but not a reason for revising upward our growth outlook for these countries.

Stock prices in Japan and emerging Asia are the exception to the general picture of rising equity values. In Japan, stock prices touched new twenty-year lows on several occasions during the intermeeting period. Although some prices rebounded near the end of the period, the major stock price indexes remain well below their values at the start of this year. We attribute the downward trend in Japanese stock prices to the domestic concerns that continue to dog the Japanese economy, plus some possible spillover from rising tensions with respect to North Korea and the effects of SARS on Japan's major trading partners in the region. The latest data have left us slightly more optimistic about the pace of economic activity in Japan this year, but we do not detect any evidence that would call for a major revision to our outlook for economic activity in that country.

One new element in the global economic picture since your March meeting has been the emergence of SARS as a major economic threat to most of the emerging Asia region. Even though we have no expertise in anticipating the course of the disease, construction of the Greenbook baseline forecast required that we make a set of working assumptions about its implications for economic activity. As we reported in the Greenbook, we incorporated into the forecast the likely consequences of SARS based on the information known at that time. In large part that involved limiting the effect of SARS primarily to key service sectors such as travel and entertainment and positing that its adverse effects would be felt mainly in the current quarter. We have added some small positive payback later this year and in early 2004 as the lost travel and sales are partially recouped. This approach yielded an estimate of a downward revision to growth this year in developing Asia that averaged about 0.5 percentage point owing to the SARS outbreak. Based on the information we have to date, we see the effects as largest for Hong Kong, somewhat less but still quite visible for China and Singapore, and much smaller for various other Asian emerging-market economies.

The end product of our attempts to incorporate these various developments into the baseline forecast is a projection for total foreign output growth of about 2 percent in the first half of this year— $\frac{1}{4}$ percentage point lower than we had in March—followed by growth of 3 percent in the second half of this year and about 3.5 percent next year. As is the case with the domestic forecast, despite quite favorable outcomes of many events related to the Iraqi conflict, we have revised down the path of foreign GDP. Most of the downward revision is due to our estimate of the near-term effects of SARS on global growth. The weaker projection for U.S. real output growth is a factor as well, particularly for Canada and Mexico. The more favorable oil price developments and some buoyancy in global financial markets provide a small offset. That concludes our remarks. We'd be happy to answer any questions.

CHAIRMAN GREENSPAN. Questions for our colleagues? President Parry.

MR. PARRY. David, I have a question about plant and equipment spending. In the last forecast you indicated that geopolitical uncertainties and risks were likely to be taking a toll on businesses' plans for equipment and software spending. Of course, to some extent those concerns have been resolved, but the forecast for plant and equipment spending in the second half of the year has been revised down significantly. Does that suggest that there are more-fundamental factors that have been at work for quite a few quarters in terms of the weakness in plant and equipment spending?

MR. STOCKTON. I'd say that in our last forecast the war-related uncertainties were just a part of what we saw as a much broader set of concerns and uncertainties about the economic outlook that were helping to hold back P&E spending. So we hadn't bet a lot on the end of the war being a major source of upward impetus to such spending. As I indicated, in general the data have been a little softer on the capital spending side, not dramatically so but enough on the core component—the non-high-tech, nontransportation component—that we just didn't see signs that capital spending would move up as rapidly as we had in the last forecast. Second, some of the revisions that we made to the second half of the year had less to do with the actual data we were seeing on the various spending categories and more with what we were seeing on the production and employment side. The latter in essence suggested that overall demand was likely to be weaker than we had anticipated. For that reason we put in some reduction in our forecast of equipment spending and also took some out of consumption. It is our view that to date overall activity in the first half of this year is fundamentally softer than we had estimated at the time of the last forecast. We are starting off at a lower base moving forward.

As I said in my remarks, because we have leaned on the employment and production data fairly heavily, it's possible that we have overreacted by still trying to disentangle what are and

what aren't war-related effects on the production and the employment sides. It could be that those effects have been bigger and that we're somehow misreading that as an indication of fundamental weakness. But in general I'm comfortable with the balance of risks that we have in this forecast.

MR. PARRY. One short follow-up question: The acceleration of equipment and software spending in 2004 is quite marked. Is a significant portion of that due to the end of the favorable tax treatment for equipment and software?

MR. STOCKTON. Certainly in the second and third quarters of next year we think we will see a relatively large pulling forward of that spending. If one could look a little beyond the 2004 horizon in this forecast, we'd expect a bit of a pothole in activity in 2005 in part because of that payback on the investment spending. But also we wouldn't anticipate as big a stimulus from even further cuts in personal income taxes.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. One of the shocks that hit the economy, of course, was the spate of corporate governance scandals. When we look at current risk spreads and credit spreads, they have narrowed relative to their early 2002 levels. I have two questions on this, David. One, do you think we are past the major part of the fallout in financial markets from these corporate governance scandals? Second, do you think we are still seeing an impact from them on the real economy, or are we past that now?

MR. STOCKTON. Well, in our forecast we incorporated the view that the worst is past in this area. In fact we'd expect, with the gradual improvement in the pace of growth going forward, that corporate spreads would continue to narrow some over the next six quarters. In

essence, there's an increase in profitability and an improvement in overall activity as well as some waning of these effects that together should result in further compression of spreads.

As for the extent to which the governance issue is having an effect, one certainly hears lots of business people talk about the effects that the uncertainties and liabilities associated with corporate governance have had on their own activities and on their hesitance to take certain actions. I'm not quite sure how to interpret those comments, but we hear them often. So that would be another reason in our minds for this effect to last a little longer and to fade more slowly over the projection period. But that's in effect trying to read the anecdotes. I couldn't tell you how many tenths of a percentage point in equipment spending we've incorporated for that effect. But I think the corporate governance issues are part of our overall story of business hesitance, gloom, and uncertainty.

MR. MOSKOW. We continue to hear some of those same stories.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Dave, you mentioned that there was a very considerable spread between the OMB and the CBO forecasts of defense expenditures in the second and third quarters. The big variable in defense expenditures clearly has to be the speed with which the armaments that were used in Iraq are restored. By this time the Defense Department would have had to place most of the orders if the expenditures are going to be costed in the second and third quarters. This is a factual question, but I would assume that, given a difference between the CBO and the OMB forecasts, OMB is more likely to be right because they are part of the Administration. You mentioned that the OMB numbers were more aggressive than your own forecast, I think.

MR. STOCKTON. Actually, the CBO number is above ours, and OMB is below.

VICE CHAIRMAN MCDONOUGH. Ah, I had it backwards. How much weaker would your forecast be if OMB is correct?

MR. STOCKTON. I'll let Mr. Wilcox, who has Treasury experience, address that question. I would just point out that, when we first started talking with OMB on this, they were in the CBO camp and were well above us. They have just in the last week or so shifted toward this lower number.

VICE CHAIRMAN MCDONOUGH. But that would add to my view that they called the Defense Department and got the facts.

MR. STOCKTON. That's quite possible.

MR. WILCOX. Actually, they started out north of CBO on the advice of the Defense Department. I'm not sure what they factored into their thinking that led them to bring their number down to below where the Defense Department said it was going to be. It may be because their figure is \$5 billion or so weaker than ours for the fiscal year as a whole, which translates to \$10 billion at an annual rate for the remaining two quarters.

MR. STOCKTON. And that is roughly ½ percentage point on GDP growth.

VICE CHAIRMAN MCDONOUGH. Thank you.

MR. WILCOX. I think it's fair to say that there is a lot of uncertainty about the likely spendout pattern. We think we've begun to see some entrails of that spending in the daily Treasury statements for April. But getting from the daily Treasury statements to the monthly Treasury statements, which form the basis for BEA's estimates, and getting from April to the quarter as whole involve a lot of estimating. There is a lot of uncertainty in all of those steps.

CHAIRMAN GREENSPAN. Getting from the monthly Treasury statement to the actual deliveries, which is how defense spending is measured in the GDP, is an even greater hurdle.

MR. WILCOX. Yes.

CHAIRMAN GREENSPAN. There they are guessing. BEA does not have partial payments or advance payments data until quite a bit later. President Minehan.

MS. MINEHAN. Dave, you referred to narrowing credit spreads, and President Moskow did as well, as a positive aspect of financial markets. I'm wondering a little about that. People tell me that some of the reduction in credit spreads is due to the fact that there's a lot of money out there chasing very few good deals. If one looks at the continuing pace of corporate downgrades and at the declining volume of corporate bond issuance and C&I loans, the question arises as to whether this is as favorable an aspect of the financial markets as we may be giving it credit for. I'm wondering if credit spreads might widen before they start to narrow again.

MR. STOCKTON. Well, that's always a possibility. It's our view, however, that the basic health of the corporate balance sheet has improved and has improved quite noticeably over the last year or so. We've seen a decline in default rates. We've certainly seen a significant drop-off in the interest share of cash flow, aided by a low interest rate environment. Whatever the cause of this recent decline in spreads, it obviously is reducing the cost of capital to businesses. Now, as I indicated in my remarks, if businesses don't have reasonable projects available then the decline in spreads might not provide the stimulus to investment spending that we're anticipating. But we're fairly confident that it has been helping to reduce the cost of capital.

As for spreads widening again, that is always a possibility, as I said earlier. If there were any significant doubt about the likelihood of a reasonable step-up in the pace of activity and therefore some reemergence of concerns about whether the improvements in corporate health that have occurred thus far can be sustained going forward, that could cause a rise in spreads.

That, in our view, obviously would be part of a very bad patch for the economy going forward. However, within the context of our forecast, we believe it's quite reasonable to expect some further narrowing of these spreads, which are still high by historical standards.

MR. OLSON. Could I just follow up on that issue? Unlike in the recession of the early '90s, this time corporate bonds and equities took most of the hit in terms of losses as opposed to bank loans. So it isn't just the corporate governance scandals or the lack of confidence in financial reporting that are involved but the fact that there were more losses in the market securities segment than in the previous period. I was interested in Dino's analysis, too, when in reference to his chart on S&P 100 volatility he related that volatility in some respects to the corporate governance issue. Even so, I think we have to remember that there were financial market losses that were separate from the corporate governance issue.

MR. STOCKTON. Absolutely. There certainly has been a very significant strain that was related to the fact that firms had invested in so many projects.

MR. OLSON. Which is a problem that seems to be behind us now.

MR. STOCKTON. Right.

CHAIRMAN GREENSPAN. Further questions for our colleagues? President Poole.

MR. POOLE. I have two quite different questions. In the Greenbook there was a discussion of the different picture of the labor market provided by the payroll employment data and by the unemployment rate. The Greenbook explanation of this focused on the participation rate. But it looks to me as though the divergence in the payroll and household employment series is larger than we usually see. Since the end of the recession, assuming that occurred at the end of 2001 roughly, payroll employment is down in total about 1 million, and household employment is up about 1.3 million or something like that. I know these series differ, but it

seems to me that the gap is larger and more persistent than usual. What can you tell us about that?

MR. STOCKTON. The short answer is “not much” because these gaps, as you know, widen out and come back in. You’re right that recently there has been a remarkably large gap between the payroll and the household survey data. Our reason for emphasizing participation in our analysis of the gaps that have developed between the payroll and the household employment data is that we’re focusing on the unemployment rate because of its implications for measuring the slack in the labor market. Movements in household employment have effects on both the numerator and the denominator of the unemployment rate and therefore have less effect on the rate. What has really surprised us is the extent to which the unemployment rate has stayed relatively low given the weakness that we have seen in payroll employment. As we highlighted in our presentation to the Board yesterday, we have some shreds of evidence to suggest that this development is probably related to a broader discouragement in the workforce than the “discouraged workers” question in the survey would indicate. As a consequence of that, while we’ve seen less of a run-up in the unemployment rate during this period of weakness, we think we’re also likely to see less of an improvement in the unemployment rate once economic growth really begins to pick up.

MR. POOLE. I guess the implication of what I’m saying is that the behavior of the unemployment rate would not look quite so peculiar if you focused on household employment rather than payroll employment because such a big gap has opened up there.

MR. STOCKTON. The household survey is the one upon which the unemployment rate is based.

MR. POOLE. Right.

MR. STOCKTON. I think it would be a mistake to focus on household employment as suggesting that there is greater health in the overall labor markets and the employment situation. Every survey taken of both households and businesses about the availability of jobs or the availability of workers lines up very well with the weakness that we've seeing in payroll employment. These readings seem at odds with the strength that is being suggested by the household sector data.

MR. POOLE. Well, the strength in the household series is not huge. It's just that there has been a substantial gap between the two series.

MR. STOCKTON. Yes.

MR. POOLE. My other question is—

CHAIRMAN GREENSPAN. May I just interrupt? We had a population census adjustment, which was supposed to smooth out the household series. But my recollection is that, in the actual published data for household employment, the number takes off very sharply at the time when the adjustment was made. I've been meaning to ask, and I'm asking now, does anybody know whether we have a discontinuity in the series?

MR. STOCKTON. Well, there is a discontinuity. But I don't know whether or not it's an important factor in explaining this recent jump. I don't know if Larry has any insight.

MR. SLIFMAN. I don't think so. We'll look into that issue.

CHAIRMAN GREENSPAN. I ask because you gave me a chart that shows hours worked on a household basis and on a payroll basis. They parallel each other until very late last year, and then all of a sudden the household hours, which are in a sense a measure of employment, jumped up sharply. That struck me as just not credible economically.

MR. SLIFMAN. I don't have a good answer for you. We'll have to look into it.

CHAIRMAN GREENSPAN. Thank you.

MR. POOLE. My other question is really quite different. The forecast depends not insignificantly on the analysis related to the macroeconomics of fiscal policy. Of course, there's a very old debate about that. On the tax side particularly, one view obviously is that tax cuts don't do much of anything for short-run activity. Can you talk a little more about the confidence intervals around the estimates of the effects of fiscal policy? There are two issues. One is what kind of tax bill we might get. The other is, given some assumption about the macro effects of that over the next eighteen months or so, what sort of confidence intervals do you put around that? Certainly over the years a position has emerged that says those effects are vanishingly small.

MR. STOCKTON. The fiscal package that we've incorporated on the tax side is one that has all the elements of the President's program with the exception of the dividend tax relief. That would be consistent roughly with the \$350 billion package in aggregate size being discussed by the Senate, not the \$550 billion package being discussed by the House.

MR. POOLE. That's a total over ten years?

MR. STOCKTON. That's over ten years. But we have incorporated in our forecast the passage of that bill, and we have its effects on disposable income starting in October of this year. So it gives a fairly good pop to disposable income starting in the fourth quarter and into early next year. It is an important factor. From the political gridlock simulation in the Greenbook, you can get a sense of how important the fiscal package is in our forecast. We'd expect something closer to 4 percent GDP growth next year instead of $4\frac{3}{4}$ percent if political gridlock materialized.

In terms of the effects of the fiscal package on the economy, it is certainly the case that the staff's forecast does not assume so-called Ricardian behavior on the part of households. We think that disposable income is going to show up in consumer spending. For some households that are liquidity constrained, it will provide an immediate boost to spending. For other households that are more forward-looking, some of this involves a pulling forward of a tax cut that was already planned. One would expect, therefore, a little less impetus to spending than might otherwise occur from that acceleration in the timing. But even that, in a present discounted value sense, is an improvement in permanent income. So those tax cuts contribute, and contribute importantly, to the growth in overall activity. If we took that fiscal stimulus out of this forecast—or alternatively, if we assumed that it happens but has no effects—there would be a more muted improvement in overall activity. We'd have a forecast with the unemployment rate still running at roughly 6 percent through the end of next year, which is in essence no improvement.

MR. BERNANKE. On the other hand, it would affect interest rates, so you wouldn't have that effect.

MR. STOCKTON. There would be some offset through lower long-term interest rates if the package did not pass. And we'd get a little crowding in on the investment side. That feature, by the way, is incorporated in the model simulations that do have a forward-looking element to them.

MR. WILCOX. I think it's also muted because many of the elements that are contemplated in the \$350 billion package are merely accelerations and so by their nature are essentially temporary measures. Accordingly, they don't cause bond markets to anticipate a substantial worsening of the long-term deficit picture.

MR. POOLE. By the same token, in the consumption area there are transitory effects as well.

MR. WILCOX. Right.

CHAIRMAN GREENSPAN. Further questions? If not, who would like to start our roundtable? President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Economic activity in the Seventh District remains sluggish. Although the overall business view is negative, I'm hearing marginally better reports than I did in March. At least part of this change in tone reflects the fact that many of our contacts were expecting greater war-related destruction than actually materialized.

Airline ticket sales did fall sharply because of the war and the SARS outbreak. However, United Airlines reports that demand has rebounded in the last few weeks, and they expect the trend to continue. Their domestic and transatlantic bookings have returned to early March levels. Bookings for Asia also have improved, after declining nearly 60 percent following the SARS outbreak. We polled our directors and other contacts regarding SARS, and with the exception of the airlines most expected a minimal and manageable effect in the near term. But if SARS is not contained, they thought it could harm new business and product development down the road.

Our retail and casual dining contacts feel that consumers have become more upbeat. That has yet to show through, however, to actual spending. As we know, light vehicle sales rebounded in March and held up in April. On the one hand, the Big Three were relieved that the war didn't overly depress demand. On the other hand, their April results were weaker than they expected given the sweetened incentives. Interestingly, and a sign that the market has become even more competitive, some of the big foreign nameplates have begun offering zero percent financing for the first time.

Outside of autos, District manufacturing remains weak. But here again reports tend to be slightly—and I emphasize slightly—more upbeat than before the war. One industry analyst told us that rebuilding Iraq will help to absorb the glut of used heavy equipment. Some equipment producers have already seen a jump in price quotes from the Middle East. A major producer of airport equipment—ramps, carts, generators, and so forth—noted that orders, primarily from international airlines, had increased last quarter. That was the first improvement in over a year.

Our contacts report that more firms are finally deciding to replace older equipment. But in terms of capital expansion, firms continue to delay moving forward even though many have spending plans in place with contracts negotiated and cash on hand. Apparently they are still concerned about cost containment. A project that used to require three signatures now requires six. Businesses also remain reluctant to hire. Both of the national temporary help firms that we speak with remain disappointed about their billing hours. Their business is clearly weaker than during the recovery period following the 1990-91 recession. We received the preliminary calculations for Manpower's third-quarter hiring plan survey, and the index fell from 11 to 6, which is the lowest level since 1991. However, the survey was completed just before the beginning of the war so that was obviously a period of great uncertainty. These data are confidential and the company has told us it won't be releasing them until June 17, which is later than normal.

Turning to the national outlook, the sparse data on the postwar economy are mixed. The April employment report, unemployment insurance claims, and the information from our temporary help contacts indicate that labor demand remains weak. On the plus side, consumer confidence has rebounded despite the weak job market, oil prices are down, stock prices are up, and equity price volatility and credit spreads have fallen. Of course the big question remains

whether business spending will finally pick up now that the burden of geopolitical uncertainty is substantially reduced.

It's hard to be optimistic about the near term. Hiring plans are still on hold, and excess capacity continues to top the list of concerns in many firms. Nevertheless, it's certainly plausible to expect the business sector to generate more growth as we move through the year. The anecdotal reports provide at least modest support for the scenario in which capital spending and hiring gradually strengthen. Moreover the fundamentals, particularly the underlying trend in productivity, are strong enough to support the eventual pickup in growth.

In general we agree with the Greenbook that the projections for this year, if realized, would still leave the economy with large gaps in resource use as we enter 2004, which is a concern. Furthermore, core inflation, which is now low, will probably head lower. Of course, lower inflation would raise the real fed funds rate. That would not be a problem for the economy if it were solidly in recovery, but higher real rates would be a concern if the current weakness is expected to continue into the second half of this year. In the latter scenario we would probably want to ease policy. I can see either of the two scenarios unfolding. At this point I think it's too early to know. We should have a better reading of the postwar economy by our next meeting.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, the Twelfth District expansion continues to be sluggish but seems only mildly affected by the Iraqi war and the SARS epidemic in East Asia. The main impact of both events was a sharp reduction in international travel, especially from East Asia. As a result, airlines suspended some regularly scheduled East Asian flights, and load factors on remaining flights fell by half or more. Some firms have reported increased difficulties in maintaining overseas supply chains due to travel restrictions and scattered plant shutdowns in

East Asia. However, the production and supply effects of SARS have been quite limited to date, and a recent pickup in domestic tourist travel suggests that war-induced anxieties are subsiding. More generally, the lack of bad news on the consumer side has been striking. Solid automobile sales were fueled by generous incentives. And while sales of most small retail items have been slow, they did not fall noticeably because of the war. Moreover, the existing vigor in housing markets was largely maintained throughout the District.

On the business side, firms have remained reluctant to expand employment or capacity in anticipation of improved demand and bottom lines. Moreover, some firms stated that their caution was not directly tied to the war with Iraq. Businesses have been investing in new information technology equipment but mainly for replacement and upgrade purposes, and District tech contacts are not especially sanguine about short-term prospects in the industry. For example, the search for cost savings has led to increased reliance on overseas suppliers—especially in China, where firms have undercut domestic production of some tech products. Of course this has an upside as well, with U.S. technology leaders such as Intel seeing strong exports of their products for use in low cost assembly operations overseas.

On a final negative note, District states are still struggling with budgetary woes. Revenue flows have been uneven lately; and despite some successful efforts to bring spending in line, most District states still face a large current year budget gap. Moreover, preliminary data for April suggest that revenue in California may fall below even the more modest targets that it set in January. That increases the need for borrowing and for other measures to ensure short-term cash flow.

Let me turn to the national economy. In light of weaker-than-expected economic data, we like nearly everyone else revised down our real GDP forecast for this year. We now project

growth of about 2¾ percent, which is below most estimates of the potential rate. The risks to the outlook have shifted in a favorable direction with the end of the armed conflict in Iraq, and it's certainly possible that this will lead to the rebound in activity that we've been looking for. But substantial downside risks related to external developments remain, including the aftermath of the war and ongoing geopolitical concerns, as do the risks from a well-known list of more fundamental domestic economic concerns. These downside risks, combined with the expectations for subpar growth, could have rather serious consequences in view of the low level of inflation. With excess capacity in labor and product markets likely to remain at or above current levels through the end of 2004, we expect core PCE inflation to fall to just over 1 percent both this year and next. As Dave mentioned, the Greenbook has a similar forecast. After adjusting for a reasonable estimate of measurement bias, the two forecasts imply true inflation of about ½ of 1 percent. An analysis by the San Francisco staff of typical forecast errors for core inflation suggests an uncomfortably high 20 percent probability that true inflation could fall below zero next year. Of course, as we've just heard and as we read before in the Greenbook, the Board staff puts this probability at 35 percent.

This possibility brings to mind familiar research suggesting that, given the long lags in the effects of policy, it's best to move sooner rather than later when the economy is within range of deflation and the zero bound. Therefore, as insurance against downside surprises to both economic activity and inflation in the future, it would seem prudent to ease policy further.

Thank you.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. The news on economic activity in the Third District has changed little since our mid-April conference call. The data suggest that our

region experienced a somewhat larger slowdown in growth in the first quarter than the nation did. But since the end of hostilities in Iraq, I've sensed an improvement in tone from our business contacts. The data show that economic activity in the Third District remains subdued. Our business outlook survey showed a further decline in regional manufacturing activity in April. The index of general activity deteriorated to minus 8.8 in April from minus 8.0 in March, and the indexes of new orders, shipments, and employment all fell as well. Respondents attributed some of the decline in orders over the past two months to the start of the war in Iraq. Most of the firms, however, said that such war-related declines were slight or moderate.

Regional labor markets also remain weak. The recent benchmarking of state employment data shows that the decline in employment in our three-state area in 2002 was not as large as originally reported. But there were declines nonetheless, and employment in the region has continued to contract this year. Residential construction, which has been one of our stronger sectors, has eased in recent months. The demand for office and commercial space continued to be soft in the first quarter. Retail sales in the District in late March and early April were running below year-ago levels in all lines of merchandise. And retailers attributed lower spring sales to a combination of unseasonably cold weather, the timing of Easter, and the war in Iraq.

But amid these reports of subdued activity, I've noticed some renewed optimism since the end of the war. During April and May I typically travel the District, holding a series of meetings with our bankers and business leaders. My exchanges with them over the past few weeks reveal an improved outlook and higher confidence that the recovery will begin to develop some traction in the second half of the year. They're not expecting a strong rebound in activity but a rebound nonetheless. Some of my contacts tell me that their firms are starting to undertake

major capital investments, feeling that they've sat on the sidelines long enough. This is a definite change in mood since our March meeting and our mid-April conference call.

My view on the national economy is similar. The hard data on the real sector have generally been on the weak side. The initial estimate for first-quarter GDP was weaker than I was expecting, and we continue to see job losses. But the softer information from anecdotal reports and the developments in the financial markets have been positive. Equity prices and corporate profits are up. Credit risk spreads and oil prices are down. In March we acknowledged that it was difficult to discern how much of the economic weakness was due to concerns about geopolitical uncertainty and how much was due to a weaker underlying economic dynamic. We also acknowledged that a short-lived and successful war in Iraq would resolve some of the uncertainty but that we wouldn't have much data on the real side of the economy soon after the war ended, given the lags in the receipt of those data. We pointed to data on oil prices, financial market indicators, and anecdotal evidence as the initial pieces of information we could look to as a way to assess postwar economic conditions.

Indeed, that is the situation in which we find ourselves today. Most of our real sector data are dated, so they continue to reflect the influences of the war and therefore are less helpful in discerning economic conditions going forward. The data from financial markets and on consumer confidence, which do reflect postwar conditions, have been quite favorable. Accordingly, I have little to say about the Greenbook and its attendant forecast. The baseline forecast seems right, and the alternative forecasts were helpful to see the sensitivity of the results. However, given that forecasting generally depends somewhat on retrospection, I don't receive the usual comfort from the staff's effort this time around. That's not a criticism of the effort but rather a manifestation of the time period we are in.

That said, I would like to react to the deflation exercise in the Greenbook. The simulation exercise implies that the probability of deflation by the end of 2004 is about 35 percent. I might quibble with the Board staff's definition of deflation; $\frac{1}{2}$ of 1 percent may seem reasonable, but recent academic work suggests that the bias in price indexes is declining. More to the point, however, I think our concern about deflation is a concern that the economy may exhibit behavior associated with deflation psychology, which includes an expectation of continued price declines. I'm not sure that a four-quarter 50 basis point benchmark captures this very well. Further, I question how sensitive the staff's estimate is to using a random selection of shocks from 1970 to 2000—a time period that includes the 1970s, a decade characterized by both volatility and a higher level of inflation. I wonder what the impact would be of using a sample period over which the economy was less volatile and the average rate of inflation was lower—starting, say, in 1980. My questions regarding definitions and time periods are in part a reaction to the results of this exercise. The results, in short, are troubling. A 35 percent probability is not trivial.

Nonetheless, given the current accommodative stance of monetary policy and the prospects of more accommodative fiscal policy, it appears wise to wait to see what additional data tell us about postwar conditions before deciding how to respond to the slowness of growth exhibited in the data. If the sluggishness continues in the period after the war, then a reduction in rates may be in order. In the meantime, I think we should remain alert to new information and evidence of changes in either direction in the real economy. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Economic activity in our Southeast region also remained sluggish over the intermeeting period. Both retail and auto sales have been weak,

while manufacturing has been soft except for defense-related production. Excess capacity still exists in the commercial real estate sector, and state governments continue to struggle with strained budgets. Labor markets were largely unchanged in March, with the District unemployment rate at 5.1 percent. Firms remain reluctant to hire new full-time employees. We're not hearing reports of significant increases in the use of temporary workers either. On the brighter side, Florida tourism and single-family construction and home sales in most of our markets remain at healthy levels.

To get a handle on the effects of uncertainty on business investment, we specifically asked our thirty-five Branch directors who met with us last week whether the resolution of the war was affecting investment plans. The answers we got suggest both that it was too soon to tell and that people were now turning their heads to reassess domestic economic fundamentals, which at least in some sectors still didn't favor expansion. Reportedly, most investment continued to be concentrated on replacement rather than expansion. That said, there was clearly a more optimistic business tone concerning the near term. I was perhaps most fascinated by comments I got at a lunch meeting of Atlanta CEOs last week. Four different CEOs came up to me individually as we gathered for lunch to comment on encouraging signs or developments in their business. Interestingly, during the lunch when the host asked the group for comments about the economy, those same individuals sat quietly. [Laughter] I'm not sure what that tells us. Putting it all together, I found little in either the available data or the anecdotal information from our region that clarifies whether the current thinking and behavior are a result of uncertainty or are simply a realization of the downside risks. It seems that it's just too soon to tell.

This is how I read the incoming data at the national level as well. While it's easy to be at least a little disappointed that we haven't yet seen concrete evidence of growing momentum, the

data are just not sufficiently distant from the war period to allow us to parse the economic consequences of resolving war-related uncertainty from the economic fundamentals. The consensus among most private forecasters as well as the Greenbook and my own forecast all make a reasonable case for growing momentum as we move through the year and into next year. But I agree with the Chairman's observation in his recent testimony that the future path of the economy is likely to come into focus only gradually.

The outlook for inflation is always an important part of our policy deliberations, and there continues to be a debate about the potential dangers of deflation. I take these concerns seriously also, but I am not yet convinced that deflation is our foremost risk at this time. Briefly I'm going to indicate why. The deflation issue is not simply about a declining price level but rather reflects concern about the potential for a significant and widespread weakening in real activity and the disruptions to financial intermediation that accompany it, like those we experienced in the Great Depression. The Great Depression deflation was in my view the result of widespread real economic weakness, policy errors, and extreme domestic financial distress, along with international financial shocks that together formed the "perfect storm." The question is whether we see similar preconditions today for such an episode and if so, what is the supporting empirical evidence.

We clearly have experienced significant external shocks. But the real economy is recovering, albeit slowly. It is not contracting. Some sectors do continue to suffer. Prices are falling for output in certain industries—the airlines, telecom, high-tech and manufactured goods generally and for some commodities. These are relative price declines, however, and do not reflect across-the-board deflation. In most instances the causes are easily explainable by idiosyncratic shocks or industry-specific circumstances. The price declines flow from

productivity increases, overcapacity, increased global and local competition, outmoded business models, and secular industrial change.

As a consequence, the relative price declines particular to these sectors are going to occur no matter what we do in the monetary policy area. Even so, the concern for policy may be that the weakening of relative prices will feed through into a general deflation. To date, however, there is no sign that this is happening. Inflation is still positive. Furthermore, none of the expectations measures either from surveys or the term structure signal that deflation is on the horizon. Lastly, the fall in the value of the dollar relative to the currencies of countries experiencing inflation is not consistent with a deflationary scenario for the United States.

What about policy mistakes? In the Great Depression, the money supply contracted over 30 percent, and financial intermediation came close to shutting down. Today, monetary policy is quite accommodative in my view, the monetary aggregates continue to grow, and bank balance sheets and capital positions are favorable. Financial conditions today appear far more positive and simply aren't comparable to the distress situation observed during the Great Depression. Intermediation is taking place, and creditworthy borrowers continue to fund themselves through depository institutions and capital markets. What we are seeing now in the financial distress indicators such as measures of default, chargeoffs, and delinquencies are within the range of standard recessions and are not in my view symptomatic of a debt deflation, nor are they a concern to banking supervision at this time.

For some there is the specter that what happened in Japan may also happen here. My reading of the conditions in Japan, however, suggests that they parallel the problems of our Great Depression. The main difference is a matter of degree, timing, and the willingness of the government to prop up economically insolvent institutions with implicit guarantees. Real

economic activity in Japan has declined for nearly a decade, and a gradual deflation appears to be expected. Financial distress in Japanese depository institutions is the most significant and well-known problem. Were it not for implicit government guarantees, these institutions would likely have failed a long time ago, and the economy may have gone into a tailspin. In the meantime, Japan continues to consume its accumulated wealth. Again, the features of this experience are not in my view comparable to our own situation at this time.

Looking ahead to our policy discussion, I would observe again that interest rates are already low, monetary policy is already stimulative, fiscal policy is stimulative and likely to get more so, and most forecasts are showing growing momentum as we move through the year and into next year. It seems to me that we have time to let the war-related uncertainty unwind and to wait for the path of the economy to become clear. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. As far as the District economy is concerned, we have the usual mixed bag of readings on activity. But overall I would say that the recent tenor of the incoming information has been perhaps a bit better. What I'm going to discuss is based a little on data but comes mostly from anecdotes heard at a recent meeting of our Advisory Council on Small Business, Agriculture, and Labor and at a meeting with the leaders of the Twin Cities financial community.

Housing has continued to be a bright spot, at least through March. All indicators of housing activity in the District have been quite favorable. As far as the industrial sector is concerned, I would say that, at worst, conditions have stabilized, and some small manufacturers are suggesting that activity is picking up. The trucking industry in our part of the world seems to be quite busy, although the large amount of consolidation in that industry may be a contributing

factor. But I would say that overall there is certainly some optimism among small manufacturers and others in industry that the next six months will be better than the last six to twelve months.

Consumer spending for the most part has held up, and credit quality doesn't seem to be a concern among the vast preponderance of banks. On the negative side, there certainly has been no discernible improvement in labor market conditions, and no dramatic increases in hiring appear to be under way. Pressures on state and local government budgets persist, and we haven't seen all of the ramifications of that yet. The major airline based in Minneapolis is suffering, as are most of the other major airlines, although to date its problems aren't quite as severe as some of the higher profile ones that we are all aware of.

Finally, based on conversations with our contacts, there doesn't seem to be any reason to expect a quick acceleration in capital spending. The story I got on that really has three parts, some of which are related. One is clearly what I would call a productivity story. Businesses simply have found ways to produce more with the same inputs. They were quite explicit about that, and they seem to feel that it has some way to go. Related to that, there is very little pressure on capacity so there's no stimulus to business capital investment coming from capacity pressures. Moreover, some businesses, as others have commented already, have been busy restructuring their balance sheets and want to get that completed before they contemplate sizable capital spending projects.

As far as the evidence on the national economy is concerned, I read it the way others have done, I think. Clearly it has been on the soft side, which has produced what I would expect—caution among forecasters and among the business community. I share that caution at this stage. But I try to remind myself that there's always the danger of getting whipsawed here by marking down the forecast just as conditions are about to get better or vice versa. One thing I

know for sure from the days when I was doing a lot of bottom-up forecasting is that, in sluggish circumstances such as this, it's very hard to convince yourself that economic activity is actually going to pick up. It's just the nature of the beast. Today, outside of defense spending, it's hard to envision an acceleration in most of the components of aggregate demand. Yet we know from history that sooner or later the economy does pick up, especially when the fundamentals—and by fundamentals I'm talking here about productivity and the stance of monetary policy and fiscal policy—are favorable.

But in addition, I view Dino's description of financial market developments, with essentially a rise in equity prices in many parts of the world and declining credit-quality spreads, as confirming what we already know, which is that in the past several weeks the big things have gone right. By that I mean that the war ended successfully and quickly, energy prices came down significantly and rapidly, and earnings have been at least no worse than earlier feared or expected. All of that gives me some comfort, but it doesn't help me answer the question as to when we might actually see some acceleration in economic growth.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I want to concentrate my comments on anecdotal information that is very, very recent because the formal data we have now are almost entirely from the period when the war was still in progress. My contacts suggest that there is a more optimistic tone, but I'm wondering whether that optimistic tone reflects more a sigh of relief that the worst didn't happen rather than any genuine optimism. Everyone emphasizes that they don't see any evidence in the data right now; there is a sense of greater optimism but nothing actually going on that suggests a pickup.

I talked with my Wal-Mart contact yesterday. It was about 5:00 p.m. on Monday, and as is usual, he had data through a good part of the day already. [Laughter] He said there is no sign of any significant increase in consumer buying. Weekend sales were 2.8 percent above the previous year for comparable stores, and the data so far for Monday didn't indicate anything new going on. He said that there is no evidence of any postwar bounce in consumer spending on the kinds of items that Wal-Mart sells. There was no weather explanation; weather has been normal in most of the country, including tornadoes in the Midwest at this time of year.

I've also been trying to press my contacts on the capital spending outlook. My UPS and FedEx contacts both emphasized that they're not buying any new aircraft. They are giving up all of the options they had previously to purchase aircraft. My UPS contact made a comment that I thought was rather interesting. UPS is even looking at paying the penalties to give up firm orders because the price of used aircraft has come down so much that it might be cheaper for UPS to go ahead and pay those penalties. Of course, for any one company the purchase of used aircraft is a capital outlay, but it is not an increase in capital spending for the economy as a whole. That may be a point that has more general applicability as we try to interpret anecdotal reports about capital spending going forward because there is an awful lot of idle office space and equipment and so forth. In particular, I'm thinking about structures where from a company's point of view they are spending more—and they tell us that—but it doesn't show up for the economy as a whole.

As I look at the national outlook in terms of the actual data, those data are almost uniformly on the weak side with minor exceptions. The positive information is mostly the financial market information—the stock market as well as bond market spreads—and, of course, oil prices also. I think we should all be aware that while a better tone in the securities markets is

a positive development, we know that later this week or next week all that could disappear in a flash. The bottom line for me is that there is no sign at all of a postwar bounce in the information that we have. Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Let me begin by summarizing my broad view. The Eleventh District is showing some signs of stabilizing with modest job growth recently, which is better than the continued job losses at the national level. The real economy continues to soften at the national level, but consumer sentiment has improved. Spreads have narrowed, profits have turned up, oil prices have declined, and the stock market has rebounded. Looking only at the real economy, further easing seems warranted, but the timing might be bad now with the financial markets signaling that a rebound may be coming soon without additional stimulus. Moreover, the markets are not expecting further easing today, so the reaction to a surprise could well be perverse. Market participants might believe that the Fed knows something that they don't.

Turning back to the Eleventh District, the economy appears to have bottomed out and is showing early and, I hope, sustainable signs of expanding at a sluggish pace. Texas has experienced positive employment growth over the last two quarters, which is better than the nation's loss of jobs, as I indicated earlier. Job growth was at a 0.7 percent annual rate. Over the last two quarters, job gains have been concentrated in construction, financial services, education and health services and in the government sector. Despite very high energy prices over most of that period, the energy sector has been shedding jobs at a rapid clip. Though Texas has had positive job growth, our unemployment rate has risen sharply and is nearly a percentage point above the national rate.

A few bright spots are beginning to emerge, though. Our high-tech industry may finally be showing signs of life. Job losses there have slowed as profitability and orders are showing signs of improvement. On the positive side, drilling for natural gas has continued to register gains now that the energy industry is more confident that strong natural gas prices are not going to go away soon. On the bad news side, the demand for gas is outstripping the ability to bring on new production, and gas prices now are expected to remain well above historical norms for several years. Oil prices are expected to fall further, but energy prices overall will not fall proportionately because natural gas and oil prices are expected to be decoupled over the next few years. Another bright spot comes from the temporary employment industry in our area, which has experienced a job surge at an annual rate just under 12 percent in the first quarter, in contrast to what Michael just reported for the bigger picture. Finally, our Beige Book contacts report that retail, auto, and restaurant sales have begun to revive after being depressed during the war with Iraq.

On the negative side, the downsizing of airline operations is continuing, and further employment reductions are expected. The wage reductions of roughly 25 percent that airline employees are experiencing are adding to deflationary pressures in the high-tech sector as is the District.

Turning to the national economy, I'm inclined to agree that the staff forecast for the second half of the year is the most likely outcome. It has been six months since we've lowered rates but the real fed funds rate is where it was before the last rate cut. Monetary policy is less stimulative, and the economy is probably less sensitive to any Fed stimulus than it was a year ago. Although federal government stimulus is expected to increase in the near future, the political process may provide less stimulus than we've been anticipating. Further delayed clarity

on exactly what will be contained in the fiscal package means that any spending that is sensitive to the tax code will likely continue to be deferred. In short, we may be getting a lot less stimulus from both monetary and fiscal policy than we think. In addition, the state and local fiscal situation only reinforces this conclusion.

As I look at the other downside risks to the economy, I'm increasingly concerned about the economy underperforming the Greenbook forecast. The outlook for economic growth in the rest of the world has been continually revised down for months on end. Also, while business balance sheets have undergone considerable repair, there's a way to go before balance sheets are in line with the economic realities of the last couple of years. That applies to the broad swath of businesses, not just to the industries such as airlines and telecom that are undergoing enormous structural adjustments.

So overall I see the risks to the forecast as lying primarily on the downside. Given how low inflation has fallen and the possibility of a shortfall from current economic forecasts, I could support an easing in monetary policy at this meeting. But as I said earlier, financial markets are signaling better times ahead, and an easing today could unsettle the markets. So I think waiting is in order. I feel the risks are weighted to the downside, but I'd rather not say that by reintroducing the bias statement at today's meeting.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. The Tenth District economy actually has shown signs of some further modest weakening since the last meeting due partly, and only partly, to the war. Both retail sales and manufacturing activity have edged down, and tourism has been soft. Some of the reduction in tourism was very clearly related to the war. There were a lot of cancellations in the tourist areas of Colorado particularly. On the manufacturing side,

just to give you a sense of recent developments, the year-over-year index for production derived from our manufacturing survey, after having reached a level of 12 in February, slipped to minus 4 in March and was minus 3 in April. The year-over-year index for new orders, however, was actually 8 in April, up from 4 in March. So it's a mixed bag but is not very encouraging.

We have met with our Economic Advisory Council and some of our directors, and there is a mixed tone in their reports, with some modest optimism but quite a bit of "let's wait and see." There has been, of course, some further pickup in energy activity and some very modest moderation in private-sector layoff announcements. Consumers are in a little better mood since military operations in Iraq ended but remain basically cautious. Most businesses report that the end of the war has not affected their plans, meaning that they are still in somewhat of a wait-and-see mode. On the inflation front, wage and price pressures remain subdued, but firms are increasingly worried about the impact of insurance costs on their profit margins.

Let me turn to the national scene. The broad contours of our economic forecast have changed very little since our last meeting. Like the Greenbook, we expect modest growth in the second quarter followed by a rebound to trend growth in the second half and then greater than trend growth next year. For all the reasons outlined by others and in the Greenbook—monetary policy, fiscal policy, the strength in the financial system, falling oil prices, and so forth—demand should pick up. But in that context I'm aware that the recent news, as others have indicated, has been relatively disappointing. That's partly the reason, which I understand, for taking the position that we should move now for insurance. Also, while I don't necessarily think that the probabilities of deflation are as high as Dave outlined—depending on the model, one can get much lower probabilities—the fact of the matter is that accelerating inflation is not a near-term threat. I understand that also as one of the arguments for going ahead and easing now.

Having thought about that, though, I am more of the view that we ought to wait and see until June. A reason for that is spelled out in Part 2 of the Greenbook, in what I think is an important statement: “. . . we cannot yet discern whether the uncertainty that may have been restraining private spending has lifted.” We will know a little more about that in June. The second reason that I would put forward for waiting until June is that if we ease now—though depending on how much—I think the zero bound will move from an issue on which we get a general question from time to time to one of significant debate and discussion publicly. The naysayers in various groups will be bringing that up because the funds rate would be that much lower and the zero bound that much closer. Moreover, we have an important discussion coming up in June on communication. Some of that will relate to the issue of the zero bound. So we will be in a better position to have clearer thoughts on how we as a Committee should talk about that going forward. I think there are legitimate questions as to how to discuss issues relating to the zero bound. While it may be easy to communicate that we can buy assets up the yield curve, there will be questions such as what we are targeting—reserves, an average rate, or whatever. I’d like to have a discussion of those issues by this Committee before we move to a more public realm on them. So I think that waiting until June has very little downside and it may position us well for a clearer view going forward from there. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. There’s little in the recent data regarding economic activity in New England that suggests much in the way of forward momentum. Recent employment data, especially the benchmark revisions in the early spring, indicate much steeper employment losses than previously thought. These losses were more significant in size in 2001 to be sure, but in the period from the supposed end of the recession at year-end 2001 to the

present, regional job losses have been relatively severe in New England compared with elsewhere. Indeed, while the region is roughly 5 percent of the nation's population and economic activity, its job losses over the past year have equaled about 10 percent of the total for the country as a whole. Massachusetts has been hardest hit among the New England states and has lost more jobs in percentage terms from pre-recession peaks than any other state. To those New Englanders who gauge conditions by comparing them to the worst recession in memory, the 1990-91 recession—and the number of those is not trivial—there is some reassuring news. Relatively speaking, things are not as bad as they were then. This time the pain is more evenly shared, albeit with New England clearly on the low side in terms of jobs.

Other, more forward-looking indicators on the regional economy have a brighter tone. Like the nation, consumer confidence in the region improved in April, and business confidence rose a bit as well, largely because of improved expectations about the future. An index of leading indicators for Massachusetts remained in negative territory, however, pushing off thoughts of positive growth for the state until later in the fall.

In our last telephone conference call, I shared with members of the Committee a great deal of anecdotal information that we had gathered over the intermeeting period. As you'll recall, those anecdotes reflected little near-term optimism about the outlook and not much in the way of plans for new capital spending, particularly domestically. Contacts since the last phone call have echoed many of the same themes. In talking with a senior official at CVS, which is a pharmacy chain with a fairly broad nationwide presence, I heard comments similar to those that President Poole heard from his Wal-Mart contacts. My source said that CVS sees no sign of a postwar pickup in spending and a continuation of the trend toward buying smaller rather than bigger sizes of items—despite what we might read about the popularity of economy sizes. He

also noted that fewer customers are buying multiple refills of their prescriptions; people are purchasing only the exact amount they need or sometimes not even a full month's prescription. So, there is clearly a trend toward less spending. Most of our contacts don't see a significant rebound in activity this year. They are all hoping that 2004 will be better.

On the national front, labor markets remain quite slack, labor force participation is down, unemployment is up, and industrial production and business investment remain subpar despite some signs of life in the telecom world. About the only good news since our last meeting came from equity markets, buoyed by the end of the war, better-than-expected corporate profits, falling oil prices, and rising consumer confidence. These bright spots seem fragile, however. Contacts at Thompson First Call expect corporate profit growth to slow substantially in the second quarter, as energy company earnings reflect lower oil prices and as the beneficial effect of currency translation diminishes. It is questionable whether markets will continue to surprise on the upside and whether confidence will buoy spending, given the impact of real economic data, job losses, and the inevitable reduction in the sense of postwar relief.

Most people I've talked to over the last several weeks have had one question in common. They ask, How is it that standard forecasts for economic growth over the next year or so all have a sizable rebound in the last half of this year? People ask this based on their own perspectives and what they see in their industries. They wonder what will happen to turn things around. Well, one answer is fiscal policy in the form of increased defense spending and tax reduction, if any of the plans now being debated in Washington are in fact enacted into law. But when I say that, the reply usually is, What about state and local spending? Taken together, state and local government spending accounts for about 12 percent of real GDP—almost as much as business investment and nearly twice as much as federal government spending. Given state deficits of

about \$100 billion or so in the aggregate for fiscal 2004, it seems clear that either spending will decline or local taxes will increase by amounts that eat significantly into disposable income.

Either way there would be some offset, however sizable, to federal stimulus.

Another answer to the question of what will foster a pickup in the economy is that monetary policy is accommodative and that the markets expect it to stay so. But is it really? With declining inflation rates, real interest rates are no more accommodative than they were before our last 50 basis point move in November, at least according to the Bluebook analysis. “Is the Fed really doing enough?” these questioners ask.

The final answer to the question lies in the fact that three years have passed, technology has become obsolete, productivity remains strong, and businesses will soon be forced to invest more. That’s the same logic used in last May’s Greenbook which forecast GDP growth, led by optimism about both consumption and investment, by the end of the year to be about 2½ percentage points higher than it in fact was. Clearly we were wrong then. Perhaps the passage of time has raised the likelihood of our being right this time. That is, an additional year of spending deferral may have made a second-half of 2003 spurt of growth more likely.

But it’s hard to find many business people—except in the biotech arena, which has mostly small firms, or in direct defense contracting—who think that the kind of growth projected in the Greenbook is a good bet, especially by the end of this year. They may simply be myopic. Nonetheless, I remain skeptical about the strength of the Greenbook forecast for the rest of 2003, even recognizing that it has been tempered a bit. I wonder as well about the projection of a nearly 5 percent pace of GDP growth by year-end 2004. This forecast seems to have more than its share of risks on the downside. But even if it is realized, we will have had nearly four years of below-potential growth and an output gap even into 2005. Unemployment rises through most

of the forecast period, falling only in the last quarter of 2004. And inflation trends downward to below at least my definition of price stability, given the uncertainties of measurement. While I'm concerned about the potential for deflation, for many of the reasons President Guynn mentioned I don't think that all aspects of deflation and deflationary psychology are as likely as the Greenbook suggests.

That said, the degree of expected price decline and its implications for slack resource use are not ideal nor in my view consistent with our dual mandate. As I noted before, with falling inflation, monetary policy has become less accommodative. It may be time now—and if not now, soon—to adjust policy so that it provides continuing support during this long, gradual recovery period. In my view, there's little risk, and there could be considerable gains in doing that; and I think there is a way to explain it neutrally.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. My comments about economic conditions in the Fourth District are not too different from those that my colleagues have already reported about their Districts. Moreover, conditions in our region haven't changed very much since my last several reports. The Fourth District's economy is poised to expand at a faster pace in the second half of this year, but reasonable doubts still exist about the timing and the extent of that expansion. District business leaders and bankers I've talked to are still expressing caution if not outright skepticism about the environment. The bankers continue to enjoy fee income from mortgage refinancings, but they know they can't rely on that product line to sustain their business indefinitely. They look forward to expanding their commercial and industrial loans, but their most creditworthy customers have yet to see any need to draw down their credit lines. Business firms still seem to place a premium on staying liquid. For example, several members of

our Business Advisory Council indicated that their customers are extending the period over which they are making payments. Some of them are extending it by thirty to sixty days, not because they don't have the cash to pay but because they want to conserve their cash and stay more liquid.

Another condition that hasn't changed in several months, as many others have already noted, is the aversion to business investment. I continue to question business people closely about their capital spending plans, and I've yet to find any concrete evidence pointing to a firming of spending plans later this year. There is just too much excess capacity in too many firms. Also, in line with what President Poole reported earlier, several manufacturers have told me that there's a glut of used capital equipment on the market and, because of the glut, prices are quite low. Some firms with very strong balance sheets are buying this equipment and warehousing it until demand picks up, reasoning that in the worst-case scenario they can just sell it again. However, most firms I've talked to don't want to buy any capital equipment even at these low prices. The equipment they already own has lost significant market value, weakening their balance sheets. Lenders, consequently, are less willing to advance credit to these firms. Business conditions haven't deteriorated—just the balance sheets.

Many manufacturers in the District also have become increasingly more pessimistic about their ability in the longer term to compete against firms that have located production facilities outside the United States, especially in areas like China, where labor costs are quite low. Some of these manufacturers are recalling the shakeout that occurred in the 1980s after a long period of dollar appreciation. In today's environment, manufacturers are still cutting their prices but are facing higher input costs for both raw materials and labor benefits. They fear that

we're in another ratcheting down of industrial activity in this country—a structural adjustment that they say began in late 2000 and could persist for several more years.

Turning to the national economic outlook, if I generalize what I'm hearing from my District contacts—many of whom have operations nationally and internationally—one inference that I can draw is that business fixed investment may be weaker than in the Greenbook path, at least for the next year or two. It could be that the negative tone I'm hearing from these business people is contemporaneous and not predictive of their future investment plans. If that's the case and the negative tone simply reflects the current cautious environment, then when economic activity picks up we may indeed see the stronger business fixed investment portrayed in the Greenbook. However, if the negative tone is more foretelling of problematic fundamentals, then perhaps it reflects a reduced expected return to new investment. So it may be telling us that the equilibrium real rate of capital has moved down somewhat and will remain lower for a longer period of time than we thought. I expect we'll talk more about that during the policy discussion. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. I've been trying to think of a term that best describes our District's economy and the best I can come up with is "treading water." I don't have a sense that the economy is sinking, but I don't see much forward momentum either.

Our latest monthly surveys on activity in the manufacturing, retailing, and nonretail service sectors in our District were conducted in mid-to-late April. They are not complete yet, but we have most of the results, and they indicate that both manufacturing and retailing are quite soft currently. Part of the weakness in retailing may have to do with the unusually cool and wet spring weather we've been having in our area. The results from the nonretail service sector

survey—which covers trucking companies, business service firms, much of the tourist industry, and so forth—are a little better. They suggest a bit of firming in some of these industries, as I think I mentioned on the last conference call. The tourist industry along the coast, for example, seems to be doing better than might have been anticipated. But again, other than a couple of exceptions like that, there's not a lot of forward momentum.

These more or less stationary conditions in our region I think mainly reflect both household and business attitudes about the near-term outlook. I would describe those attitudes as skeptical or still mixed, with a fair amount of lingering pessimism despite the early and successful conclusion of the war. A lot of people in our area seem to think that the sluggishness in activity is due primarily to the remaining slack in the economy that was created by the reversal of the boom of the late '90s. They figure that it cannot easily be corrected by low interest rates or tax cuts but just has to be worked through—for lack of a better phrase—however long that takes. One bright side of this is that attitudes about the outlook could improve quite rapidly if people get a sense that this working-through process is nearing completion. In that regard, any upward bounce in activity that eventually does result from the successful completion of the war—and despite the lack of clear evidence now I think we could get something like that—could be helpful if it's taken as a sign that this process is nearly complete.

Most of the recent data suggest that the national economy is also treading water. By all accounts real GDP continues to grow moderately; but hours worked are still contracting, and the output gap appears to be widening further. In this context, to me the most striking recent development is the behavior of core inflation—a point a lot of other people have commented on already. I think the Greenbook put it very well, David, noting that in the last few months core inflation has entered a range that, given the measurement bias, really approaches zero inflation.

A deceleration of inflation would have been regarded as desirable in the past; a lot of us thought that. But as the Chairman aptly put it last week, today substantial further disinflation would be an unwelcome development. I thought that remark was something of watershed, Mr. Chairman, because it confirmed very nicely that we truly are conducting monetary policy in an environment of price stability now, with risks on both sides of the coin going forward. Specifically, just as we faced the risk of rising inflation momentum in the past—and undoubtedly will again in the future—we now also face a meaningful risk that disinflation may acquire momentum and create deflation and a zero bound problem, with adverse consequences for the economy and for monetary policy.

With this in mind, the crucial question today, as I see it, is whether the recent further actual disinflation indicates that the risk of growing disinflationary momentum has now reached the point where we should act to preempt it. I've struggled a great deal with that question, and the deflation exercise in the Greenbook didn't raise my comfort level a whole lot, David. I think it's an exceptionally close call. But on balance, recent developments suggest to me that we're not quite at the point where we need to act. As others have noted, the real funds rate is at or near zero and has been in the vicinity of zero for some time. Oil prices are falling, the stock market seems to be strengthening, profits appear to be rising again, credit spreads are continuing to improve, and the Greenbook is projecting substantial additional fiscal stimulus in coming quarters. Given these developments, I think we can prudently wait a little longer before acting and try to get a clearer idea of whether the economy is going to get a postwar boost or not. I don't think we really know the answer to that yet. Waiting would also have the advantage of ensuring that we won't undercut any revived optimism that the end of war might stimulate in the near term.

CHAIRMAN GREENSPAN. Let's break for coffee and come back in ten or fifteen minutes.

[Coffee break]

CHAIRMAN GREENSPAN. Are we all here? Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I think the answer to President Minehan's questioners—who I suspect are really her alter egos or perhaps she's been speaking into the mirror in the mornings—as to what will lead to higher growth ahead is that some of the factors restraining growth over the last few quarters should be abating. Many of the developments over the intermeeting period have made me a little more confident in that judgment. It seems to me more likely that the expansion will indeed strengthen going forward and break out of the 1 percent to 2 percent growth path that it has been on since last summer.

As others have observed, the ebbing of geopolitical risks has bolstered confidence, lowered the oil price tax faster than anticipated, and fostered better conditions in financial markets. The signs of improvement go beyond the reduction in geopolitical risks. Increasingly, it looks as though the restraint is lifting from the other persistent force we have cited as holding back the economy—the unwinding of the excesses of the late 1990s. These include the fallout from bad credit decisions, deficiencies in corporate governance and transparency, the drop in equity prices, and the overshoot in capital spending. Risk spreads in credit markets have more than retraced their run-up of last summer, appropriately so in my view since bond default rates have also come down substantially. Market reactions to occasional new revelations of corporate malfeasance have been much more measured, suggesting that investors have greater confidence in the information they are getting from most businesses even before they've had the benefit of new leadership at the Accounting Oversight Board! [Laughter] As could be seen in Dino's

charts, the implied volatilities in bond and stock markets have also fallen to the levels of last spring. As a consequence, although surely some of the caution from governance scandals is lingering in business decisions, the cost of capital to businesses has decreased, and firms need to have much less concern about conserving cash for fear of overreaction to earnings announcements in skittish markets.

Equity prices have not retraced all of their losses of last summer, but they are well off their lows of that time and have been for a while so that the force of the negative wealth effect should be decreasing over time. The latest real side data show a little less weakness in nonresidential construction. The most recent data do indicate a tentative pickup in orders for equipment, reinforcing the assessment that most capital overhangs have largely dissipated and raising hopes that replacement demand may be strengthening. Moreover, demand will be further supported by a lower dollar, which notably has occurred without any perceptible adverse effects on U.S. asset prices. Surely lower oil prices, greater consumer confidence, and more accommodative financial conditions will work together with stimulative fiscal and monetary policies and continuing gains in real income from rising productivity to strengthen growth. You can try that in the mirror, Cathy, to see if it works.

But as the Chairman noted in his recent testimony, the extent and timing of the pickup are uncertain. We still don't have enough new information to sort out whether the marked weakening in February and March was almost entirely related to the close onset of war or also reflected more-persistent problems that will damp the upturn. We still don't have enough information to judge how much the better conditions will feed through to spending and production. What is not uncertain is that whatever recovery the economy experiences will be starting from a much weaker position than I had expected just a few months ago. The data we've

received over the last two intermeeting periods were considerably softer than I had anticipated, and my expectations for growth this year have been revised down a lot since January. In addition, consumer inflation has come down faster than I thought it would.

The staff has interpreted what we've seen as partly reflecting weaker underlying demand as well as war-related jitters. So, the level of output in the Greenbook remains below the level of the January forecast through the entire projection period. Even so, the staff has incorporated a prompt and sharp strengthening of growth in coming months just to hold the economy on a slightly lower path. These judgments seem reasonable, though as I just implied it may be too early to make this call with much confidence.

As for the risks, I don't have anything useful to add to the sense of risk on both the upside and the downside that Dave and many of you have mentioned. What I do want to emphasize is that this lower starting point for activity and prices makes a rebound of at least the dimensions and persistence envisioned in the staff forecast—if not a stronger rebound—all the more critical for economic welfare, and it has potentially important implications for policy. The output gap is wider than expected; and without a very strong rebound, it will remain wider at a time when there is no reason to accept the loss of income and production longer than necessary. Moreover, the slack in resource utilization implies that inflation is poised to go lower from levels already consistent with price stability. I don't believe the current low inflation rate is itself an impediment to economic prosperity. I don't see evidence, for example, that the zero bound on wages is raising actual or steady-state unemployment rates. My guess is that most of the bellyaching about the lack of pricing power or current inflation rates would evaporate if demand were stronger and capital utilization rates higher.

But there are risks from low and declining inflation rates. For the most part inflation expectations have been stable. I'm not sure, however, that people have taken on board the very low level of underlying inflation. Especially if that inflation falls much further, inflation expectations could decrease in coming quarters as headline inflation moves lower following the energy price declines. This would tend to raise real interest rates, absent offsetting policy action. Also, even at high levels of employment, very low, steady-state inflation—by keeping the federal funds rate and other interest rates down—could limit our room to maneuver were the economy subsequently to be hit with a downward shock. Such risks at the current rate of underlying inflation or one that was only a few tenths lower probably aren't large. But I would be concerned if it looked as though we were on a glide path that would leave inflation at considerably lower levels. For all these reasons, it's important that we soon see the economy strengthening, and by quite a bit, in order to reduce the output gap and limit the decline in inflation. I'm looking forward to the discussion of the stance of monetary policy in light of this imperative. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Thank you, Mr. Chairman. The Second District economy has shown scattered signs of improvement since my last report. But generally most sectors can still be characterized as weak. Employment and labor force indicators have been mixed with little change overall, as labor markets have remained slack. Manufacturers note some improvement in business conditions in recent weeks and are increasingly optimistic about the near-term outlook. Retailers reports that sales remained below plan in March but picked up somewhat in early April. Based on two separate surveys, consumer confidence has improved moderately since the last report. Housing permits weakened in the first quarter as the slowdown

in single-family construction more than offset increases in apartment construction. Sales of existing single-family homes and apartments slowed noticeably, though selling prices have remained firm except at the high end of the market. Demand for office space in the New York City area continued to slacken in the first quarter, and District banks reported increased demand for home mortgages and steady-to-lower delinquency rates.

I find myself so in agreement with Governor Kohn's remarks that I would just like to add some very small, almost footnotes to them. On the geopolitical uncertainty, I've argued at previous meetings that the Middle East is basically an unstable place and, therefore, that the geopolitical uncertainty is likely to continue but will be different. As for the likelihood of Iraq stabilizing into a model democracy, it could well happen; but if it does, it will happen slowly and there will be many bumps along the road. The possibility of instability in some of Iraq's neighboring countries is quite high, and therefore I think it is likely that we will live in an environment of continuing geopolitical uncertainty. What one doesn't know is whether the American people and those in other nations will react the way they did to terrorism—that is, to accept it as a fact of life and learn to live a reasonably normal life with normal economic reactions despite that reality.

As for risk aversion, I think it is likely to continue. But risk aversion is a psychological condition and is rather similar to an oversold trading position. If half a dozen of the most respected business executives in America suddenly turn openly optimistic, I think the possibility of others following is quite high. Whether that will happen, I don't know. But the nature of the American society is that one would expect that to happen, with the timing being difficult to guess.

I think the main thing we have to cope with today is the reality of the marketplace. After a period of substantial volatility in the equity market, the recent upturn in the market impresses me as something other than just an extra bit of volatility. It has at least the makings of a breakout, but it is a rather unstable and very uncertain one. In the debt markets, as has been discussed, spreads have narrowed, but they're still broad by historical standards, and that too is a rather tentative movement. The dollar weakness has continued; today the euro is at about 113.50. I think we have to be careful about the move into the euro as the currency of choice, with growing speculative long positions in the euro. That could turn into something that would not be very pretty to watch—that is, a dollar that is weakening far beyond what the macroeconomic fundamentals would indicate.

But last and perhaps far more important, there is absolutely no sense in the marketplace that we are going to change policy today. Even though a week ago I thought that changing policy today would have quite a lot to say for it, I believe it would be very, very dangerous to surprise the market in light of the precariousness of its recent strengthening. I think the immediate reaction of market observers would be to ask, What does the Fed know that we don't know? The answer to that is "nothing." So it seems to me that the prudent central banker would think very seriously and decide that policy should stay where it is. Thank you.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. In preparation for any FOMC meeting it obviously seems appropriate to make some judgments about three different forecasting issues. The first is whether the baseline forecast is both reasonable and acceptable. The second is how the forecast has evolved over a period of time, either between meetings or even going back a

little further in time. And the third is what the risks are around the baseline. So let me tell you how I, at least, look at each of those three issues.

On the first, I'd argue that the Greenbook baseline forecast may well be reasonable. Certainly with the end of the military phase of the Iraqi war, financial conditions have clearly improved, as others have already indicated. Equity prices are rising. Risk spreads have narrowed somewhat, though they are still relatively wide by historical standards. Reductions in oil prices, as expected, have become clearer, and we've seen an improvement in consumer confidence and a small uptick in corporate profits. All of those developments I would argue might well be consistent with the basic contours of the baseline forecast.

Taking that baseline as at least a reasonable outlook at this stage, the second part of my first question is, Is it acceptable? To that my answer is a resounding "no"! I don't think the baseline growth outcome is sufficient. The output gap envisioned in the baseline persists for several quarters; it is not closed during the forecast period. Unemployment rates remain well above any that are reasonable for a well-performing U.S. economy. In addition, the composition of GDP growth is an issue. At least in the near term, the acceleration in GDP growth is heavily dependent on government defense spending, and indeed, private demand is noticeably weaker than one would like. Importantly, as others have mentioned, the inflation prospects offered in the baseline are a concern. In the context of our price stability targets and recognizing some uncertainty about measurement, I also judge the inflation outlook to be verging on unattractive. On this point I want to make a slight distinction to explain the nature of my concern. This is not a question in my mind about deflation per se. It's certainly not a question of going back to the experience of the '30s. This is really much more a question about further disinflation, which is troubling for a number of reasons. One reason is its implications for the effectiveness of

monetary policy. A second is the vulnerability of an already weak economy to any additional shock that might emerge from either internal or external sources.

Also, I would say that having price inflation drop even lower than is currently forecast increases the possibility of what I think of as some self-fulfilling negative ramifications for both households and businesses. So I'd argue that even if the baseline is reasonable—as I believe it is—I don't think it's necessarily acceptable and we should be vigilant in that regard.

The second issue that one thinks of in terms of forecasts is exactly how the forecast has evolved. As David already pointed out in his prepared remarks, there have been significant downward revisions in the staff's forecast since March. I think Cathy compared it with the projections of about a year ago. I went back to the September 2002 Greenbook and looked at each one of the Greenbook forecasts since then. With one exception, the GDP outlook has been marked down each time. There has also been a marking down in the rate of inflation. That clearly reflects the fact that the data have been coming in weaker and weaker during every one of these successive periods, which does at least undermine to some degree the confidence one might have in the Greenbook forecast.

What the staff has done in the context of incoming data that have been weaker and weaker has been to reduce the expectations for the first part of 2003, reduce a bit the expectations for the second part of 2003, but ramp up quite dramatically the expectations for 2004. As I read it, they've done that but have given exactly the same set of reasons for growth that at one point was thought to be around 3.5 or 3.6 percent in 2004 and is now projected to be 4.8 percent in 2004. So we do have a bit of a problem in that we're starting, as Don Kohn said, from a much lower base and hoping to get a much bigger pickup in 2004. I trust that this is not the triumph of hope over experience and reality.

Let me go to the third question, which involves the issue of risks. I would say that the risks are in some sense balanced, but I think we have to be very cautious in that assessment. In order to see any upside risks with respect to the baseline forecast, I think two things have to emerge and they have to do so very soon. One is that the tentative nature of the various conversations many of us have had with business people has to turn quickly to a revelation of a great deal of pent-up demand either for business fixed investment or for inventory. I don't see that that's going to come from the structural side of investment whatsoever, for reasons that several of the Presidents have already indicated. I think President Poole, President Pianalto, and perhaps someone else raised the question of whether or not investment in another firm's excess capacity ends up being a positive with respect to the economy as a whole. So while it's possible to argue that there is some upside risk on the real side of the economy, I would say that it's a fairly tentative argument.

I think there are some reasons to be concerned about the downside risks to the real economy. One is that conditions are not as accommodative as one might think. In the context of inflation that has been coming in lower and lower and an economy that has been getting weaker and weaker, monetary policy in fact is not as accommodative as some have been saying. When we get to our policy discussion, I'm sure somebody will point out that the little dot on the Bluebook chart that depicts the location of monetary policy has moved firmly back within the range of the real equilibrium interest rate. It is no longer below the equilibrium rate, so monetary policy is not as stimulative as we would like to believe.

On the fiscal side, we've had some colloquy about that already, and I would only add that it does seem likely that we'll have fiscal stimulus based just on the nature of government

expenditures that are already planned. It is possible, though not certain, that there will be additional fiscal stimulus. So we should be careful there.

Having indicated the risks I see with respect to the real economy, they seem to me balanced at best or perhaps tilted a little to the downside. With respect to the inflation picture the risks seem almost all to the downside. In the context of an economy with so much underutilized capacity, it is really hard to imagine a case in which suddenly we will have an outbreak of inflation that we have to worry about. It is unpalatable but not impossible to imagine that we may have too much price stability and will have to worry about that. I'd close by recognizing that indeed the market is expecting very little of us in terms of a policy action today, and we have to take that into account when we get to that part of the discussion. But I would say, If not us, then who? And if not now, then when? [Laughter]

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Let me add two points to the discussion. The first is on fiscal policy. This is going to be a very key week with respect to fiscal policy because the tax writing committees of both the House and the Senate meet this week. It seems to many that the momentum has shifted to the House, in part because the House committee chairman has exhibited perhaps the strongest thought leadership and maybe the most sagacious political leadership as well. I must say that he's also dealing with the most friendly and accommodative budget restraints.

The Senate probably will meet also and may make an effort to cram the President's dividend exclusion proposal into the legislation in some way within the limitations of their budget restraints. It seems likely that, instead of the President's proposal with respect to dividends, they may come out with a cap on the tax rate on dividends and a drop in the tax rate

on capital gains. Many in the Congress will find that more palatable than the dividend exclusion, just in terms of the ability to explain what they are doing. That would also then clear the way for the acceleration of the previously enacted tax cuts. I might note that last Wednesday the Chairman, in response to questions by the House Banking Committee, made a real effort to try to distinguish between tax cuts that stimulate capital spending and tax cuts that stimulate consumption. But I would say that we don't see any of that discussion being reflected in the deliberations on either side.

In trying to read the political tea leaves, it seems as if people have a sense that the White House would be willing to accept a tax package with any number north of \$350 billion—and if it could be north of \$450 billion, that would be all the better. But we will know more a week from now with respect to tax policy than we know today.

My other point relates to the banking industry, where interestingly there is little change from what I reported at the last two meetings. We saw throughout all of 2002 a gradual decline in asset quality, but in 2003 it has remained stable. On the consumer side, there has been no postwar bounce, in part because there was no wartime decline of any significant extent in the consumer area. We are hearing anecdotally—from members of our Federal Advisory Council at its meeting last Friday and from a number of other people—the first hints of plans for expansion or indications that business people think the time might be right to expand. It seems to me likely that this is another area where there's a difference between the data we can measure and the anecdotal information we are picking up, which is *ex parte* the numbers we can read.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. Relative to previous meetings, there has been considerably more discussion of inflation and disinflation at this meeting. I'm gratified

about that because I think these considerations should be central to our policy analysis at this point. Let me just add a few points to the discussion.

Disentangling persistent from temporary changes in the rate of inflation is difficult, and measurement issues cloud the picture further. Nevertheless, the best guess is that underlying inflation has been declining recently. Comparing the year ending in March 2003 with the year ending in March 2002, the Greenbook notes that inflation as measured by the core CPI has fallen from 2.4 to 1.7 percent. In the past six months this measure has been barely above 1.0 percent at an annual rate. Inflation as measured by the chain version of core CPI has fallen from 1.8 percent last year to 1.2 percent this year. Data for the past six months are not available. Inflation as measured by the core PCE deflator has been stable at 1.5 percent for the past two years, but the Greenbook notes that this stability is largely a result of increases in nonmarket imputed prices. Excluding nonmarket prices, core PCE inflation fell from 1.3 percent in the year ending March 2002 to 0.9 percent in the year ending March 2003, and it has averaged 0.2 percent over the past six months. Of course, for a given nominal funds rate, disinflation amounts to a de facto tightening of monetary policy.

Because monetary policy works with a lag, in principle we should be most concerned about the forecast of future inflation rather than past inflation. Forecasting inflation is tricky, though it is worth pointing out that several well-known academic studies have found that the Greenbook's forecasts of inflation are better than any made in the private sector. The staff estimates that core PCE inflation will be about 1.0 percent in 2004, owing largely to the fact that even with growth of nearly 4 percent in the second half of this year and in all of 2004, the economy would still have considerable slack well into next year.

Of course, as always there are both upside and downside risks to the staff forecast. However, our loss function with respect to the inflation forecast error should be asymmetric. A 1 percentage point undershoot of inflation from the forecast, which would bring us to the brink of outright deflation, would be much more costly than a 1 percentage point overshoot, undesirable as the latter might be. In short, for the first time in many decades the risks to our inflation objective are decidedly downward. Given that the risks to employment also seem to be downward, there appears to be a prima facie case for easing policy. I tend to agree with that conclusion, and barring an exceptionally strong near-term turnaround in the economy, I hope that the Committee will adopt a posture of leaning toward ease.

I would like to add an important caveat, however. The chance that we will hit the zero bound constraint at some point, though not large, is certainly not negligible. In response to President Guynn's earlier remarks, by the way, I believe a zero bound constraint on policy is the major risk of a deflationary environment—one that could have real costs because it would inhibit our ability to stabilize the economy. More generally, as noted by Governors Kohn and Ferguson, deflation puts a floor on the real interest rate and can therefore destabilize and distort capital markets. Theoretically the risk of the zero bound only increases the urgency of a preemptive easing. However, it also seems important that we have a plan for how we might proceed seamlessly from standard rate-cutting to more nonstandard operations should such operations become necessary. For me, along the lines suggested by President Hoenig, if there is an argument for delaying further easing at this point, that is it. A delay would give the Committee a chance to think about how an easing action fits into a broader strategy that may involve—though we hope it will not—nonstandard policy operations. Thank you.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. In preparing for this meeting I started out looking at previous forecasts, as President Minehan and Governor Ferguson did. I noted that we've had, for the past three years now, a forecast that the economy will get better in the second half of the year. We missed it the first time in 2001 because of a terrorist attack and the second time in 2002 because of corporate governance scandals. I don't know if I'm optimistic or pessimistic about it happening a third time, but I could hope that the new chairman of the Public Company Accounting Oversight Board might have some effect on the risk of that.

CHAIRMAN GREENSPAN. In which direction? [Laughter]

MR. FERGUSON. The brilliant new chairman!

MS. BIES. Yes, the brilliant new chairman! I am concerned, though, that we're starting out this year in a soft spot, unlike the last two years when we had stronger growth in the first half of the year. Hours worked are continuing to decline in this soft period, employment is falling, and production in the manufacturing sector in particular is showing significant weakness. The main impetus for the recession was the weakness in business fixed investment, and the forecast for BFI has again been revised downward in the Greenbook for this meeting.

I agree with some of the comments that have already been made around the table that, while corporations are cautious, they haven't been inactive. We've seen significant improvements in inventory control, advances in productivity, and increased liquidity as firms have moved to longer-term funding and as cash flows have risen because of improving profit margins. But as I look at this picture, I'm still relatively pessimistic as to what is going to happen to spark business confidence again. So I tend to believe that the risks are biased toward weakness, especially given that I accept the forecast that economic growth will be below potential even beyond the 2004 forecast horizon.

What about the outlook on the inflation front? As several people have already remarked, the Greenbook assessment that the probability of deflation by the end of next year is 35 percent clearly is a statement that catches one's attention. Further, I know that the staff has been doing work on the confidence intervals for various measures of inflation and the measurement bias. That work shows all three major inflation measures at the top of the confidence band of about 1 percent by the end of next year. This concerns me. We don't need to see deflation because disinflation—getting the inflation rate down to 1 percent—is a significant enough issue.

There has been a lot of talk that businesses don't have the confidence to invest because of concerns raised by governance issues. I think the lack of confidence relates to the continuing outlook for very weak pricing power. Business management tries to commit to the marketplace that their company will show earnings growth. They commit to that by expecting some type of top line revenue growth. But we're sitting here expecting economic growth over the forecast period to be below potential, with inflation at 1 percent. That means that if a corporation makes a serious commitment to growth, they have a very small margin of error. When cash flow from top line growth provides a robust level of new incoming revenue, companies are more able to take the risk of investing in new business lines and new plant openings. But with an outlook for continued sluggish economic growth and overall inflation at 1 percent or less, in effect we confront a disinflation risk world that at some point cumulatively slows growth going forward. Therefore, I support the comments that President Santomero made about the importance of averting a disinflation psychology in the period ahead.

So I'm concerned that we have risks on both fronts right now—the risk of real growth below potential for quite a long time and also a risk of further disinflation that is considerably stronger now than we would like. I don't think I can identify a bias or say that the risks are

balanced or unbalanced. In my view we don't have a Phillips curve situation. I think we have two negatives facing us.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. I didn't deliberately set out to be the last speaker today. I was just a little slow getting on Norm's list.

One might liken the economy today to early spring in Michigan. One can see some scilla here, some spring beauties there, and trillium over there. Ah, one says, "Spring is coming!" True, it is coming, but there are still three inches of snow covering the yard! [Laughter] There are a number of bright spots in the recent data, and previous speakers have mentioned all of them, so I will pass over them in the interest of time. Bright spots aside, we should not forget that we need to see many signs of spring before we conclude that warm weather is here to stay. Moreover, despite the bright spots, there are still some not-so-bright spots. Industrial production is down again; the workweek is down; the state and local fiscal situation looks ever more dire; and foreign growth seems to get revised down every time we hear about it.

The baseline in the Greenbook forecast incorporates much of what is known about spending demands in the near term in the framework of a structural model that has a good forecasting record. As the Greenbook forecasters will be the first to admit, they need to see a lot of good news to bring about the healthy growth implied by the Greenbook forecast for the latter half of this year and all of next year. This growth is healthier than that in the Blue Chip forecast by ½ point this year and a full point next year. But even this reasonably optimistic forecast leaves continuing output gaps and an unemployment rate of 5.6 percent by the end of next year. Indeed, even if investment were to be stronger than anticipated, the output gap would still persist

because, the way the Greenbook forecast is done nowadays, both aggregate demand and aggregate supply are raised in response to a positive investment shock.

Over the past several years we have often had a situation where output looked weak and inflation benign. We would typically argue that we could pursue one part of our mandate, output growth, without sacrificing the other, stable prices. One arrow seemed to be pointed down, and one was in neutral. Today, however, as many of you said, that is not the case. Now inflation has fallen to dangerously low levels, and both arrows are pointed down. Evidence of the disinflationary dangers is widespread. The Greenbook probability of deflation has risen to 35 percent, which is getting pretty close to even odds by my count. The increase in the key market component of core PCE inflation has dropped very sharply, with the index essentially flat for the last three months. It is possible that this high-frequency reading will not be sustained, and it's also possible—as the Chairman, for one, suspects—that this measure is inordinately influenced by declines in the value of rental housing. But taking out the influence of rents, growth in the market component is still dropping, as is growth in the overall core PCE. In terms of my own desires, the core PCE is now growing at a rate that is arguably below the band that I personally would be comfortable with over the longer run. Non-oil commodity prices are very cyclical, but they've been moving down recently; and, of course, oil prices are way down. Both measures of wage change are growing at low rates in the latest data. All of these are current measures. With output gaps forecast to persist, measures of inflation are likely to drop further. As I said, both of the arrows reflecting our mandates are pointed down.

So, what to do? Many of us I think have already made a strong case for easing policy right now. At the same time, there are market uncertainties. There is some chance that the war was a big factor in holding down spending and some possibility that this damping influence has

already been lifted. So there is some chance that we will soon start to see better spending data. I, for one, would like to see much better spending data. We should never let uncertainty become an excuse for prolonged inaction. We might let it be grounds for a slight further delay. Here I would support Tom Hoenig in the view that a slight further delay would also give us more time to organize our whole strategy in this new non-inflationary atmosphere. Thank you.

CHAIRMAN GREENSPAN. Thank you very much. We've completed our roundtable, and we'll turn to Vincent Reinhart.

MR. REINHART.² Thank you, Mr. Chairman. I'll be referring to the materials that Carol is handing out now. The marked shifts over the intermeeting period in market participants' expectations about monetary policy are evident in the top panel of your first exhibit, which plots the evolving probability that the funds rate would be $\frac{1}{4}$ point lower by this afternoon implied by the May federal funds futures contract. Over the latter part of March and early April, before hostilities with Iraq were settled, investors talked about the possibility of an intermeeting easing, making them relatively confident that the funds rate would be below $1\frac{1}{4}$ percent by the end of today. The cessation of hostilities and the related rally in the equity and corporate debt markets, along with the perception that the Federal Reserve was not preparing the market for easing, deflated that notion. As a consequence, market prices are now consistent with about a 1-in-4 chance of action, about where that expectation has been for the past two weeks.

Market participants still expect the Committee to ease though and ultimately by more than anticipated at the March meeting. As shown by the solid red line in the middle left panel, the current path of expectations of the federal funds rate touches 1 percent by November and has shifted about 50 basis points lower at a longer horizon. Indeed, the option-implied probability distribution of the funds rate this fall (the middle right panel) suggests that investors are placing considerable weight on a level well below 1 percent.

Evidently, a string of weak economic releases—especially on production and employment—more than offset the lift to the economic outlook that presumably attended the decline in uncertainty, the fall in oil prices, and the run-up in share prices over the intermeeting period. It is worth noting that the decline in uncertainty about interest rates, the bottom panels, was pronounced all along the yield curve. The narrowing of the width of the 90 percent confidence band for the federal funds rate 150 days hence derived from options on Eurodollars, at the left, was paralleled by those posted by one- and ten-year-ahead forward rates on swaps, at the right.

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

A more favorable backdrop of financial and commodity markets might be one of the factors inclining the Committee to keep policy on hold at this meeting, a subject treated in more detail in your next exhibit. The case for holding policy unchanged would be supported if the Committee viewed, as noted in the top panel, the staff forecast to be likely and, over the period that could be reasonably thought to be influenced by action today, acceptable. Underlying that forecast is the judgment that economic fundamentals will spark a relatively quick pickup in the growth of aggregate demand over the balance of the year even holding the funds rate at 1¼ percent. This can be seen by the blue bars in the middle left panel, which show the staff's forecast that the growth of real GDP will step up from its sub 2 percent pace to a rate first closer to and then beyond that of potential. While it will take some time for this growth to eat into the prevailing level of economic slack, especially given the lackluster performance thus far this quarter, monetary policy action taken today would mostly be felt—at least according to the staff forecast—when the economy already has gained a full head of steam.

You may have reason to believe that economic acceleration will be quicker, implying, as given by the second item in my list in the top panel, that economic slack would be worked down sooner and disinflation would be less likely than in the staff forecast. For example, while the extent of fiscal impetus in the current baseline forecast is a bit larger than in the previous one, the Committee might believe that the political compromise likely to be struck will take part of all the proposals currently on the table so that the total ends up significantly larger than now envisioned. To give you a sense of the upside risk, the Greenbook included an alternative simulation with both higher government spending and lower taxes. As shown by the red bars in the middle left panel, that would be sufficient to boost the growth of real GDP 1 percentage point this quarter and hold growth at the baseline thereafter. Even if you are not confident that fiscal stimulus will be forthcoming—as gridlock is always a possibility—you might want to wait for those prospects to come into sharper focus before adding monetary policy easing into the mix.

Another reason the Committee might not view the time as right to ease—even if it were leaning in that direction—is that it might be worried that financial markets could react adversely to such action, as noted by the third item in my list. As shown in the middle right panel, markets have been on a tear in the past nine weeks, with equity prices up 16 percent from the March 12 low and riskier corporate yields ¼ percentage point to 1½ percentage points lower. That rally came even as expectations of very near-term monetary policy ease, as I already described, were being rolled back. Investors might wonder how weak the Committee considered the outlook to be that it was necessary to augment the already appreciable relaxation of financial conditions since mid-March. Moreover, such an action would stand out all the more in comparison with your recent behavior. The bars in the bottom panel record the immediate surprises associated with Committee decisions over the past three years, measured as the actual target rate decided at each of the meetings less the expected funds rate gotten from futures markets the day before. As can be seen, a surprise

today on the order of 20 or 45 basis points, as would be the case if you ease 25 or 50 basis points, respectively, would be an outlier.

Alternatively, you might see the need for easing, discussed in exhibit 3, as too compelling to be countered effectively by arguments about timing and reception. As noted in the first bullet point, in the Greenbook outlook resources remain underused throughout the forecast period, shown in the middle left panel by the unemployment rate, which stays at or above 6 percent in this and the next four quarters. While a $\frac{1}{4}$ or $\frac{1}{2}$ point easing may not materially influence the near-term contour of that path, the projected almost 1 percentage point spread of the unemployment rate over its natural rate at the beginning of next year is more likely to be within the ambit of your influence.

You may not be so sure that the economy will deliver even that performance, particularly if you believe that chief executives still see capital stocks as excessive or you believe that the prospects for economies abroad are especially gloomy. A failure to get the forecasted rebound in growth raises the possibility that households' support to the economic expansion will finally sag, setting in motion adverse dynamics that may be difficult to stop by future easing. Market concern about the economy may be growing in that the implied probability of the funds rate sinking below 1 percent by the autumn (the middle right panel) has risen of late. The insurance provided by a prompt easing may be attractive when, as in the second bullet point, downside risks to demand are more likely or more costly.

Third, even if the Committee believes in a forecast that, to a first approximation, meets its responsibility to foster sustainable economic growth over time, it has another objective as well. Easing may be favored on the concern that, as in the third point, inflation may fall further from an already low level and jeopardize your commitment to price stability. The four-quarter growth in the consumer price index is 1.4 percent at the end of the staff forecast, which is shown by the horizontal line in the bottom panel. While such an outcome or lower has occurred about 30 percent of the time in the postwar period, it has happened in only two years since 1965. True, for part of that time the Federal Reserve had lost the anchor provided by price stability, but you may have concerns that some costs arise from being in a region so seldom traveled.

Whatever the choice about the level of the federal funds rate, you will still have to grapple with the risk assessment, as discussed in the last exhibit. The elevated uncertainties of March that led the Committee not to characterize the balance of risks have abated. Indeed, those uncertainties have probably diminished to the point where the same rationale as in March could not plausibly be repeated to refrain from stating the balance of risks. Still, judging from a recent survey of primary dealers, informed outsiders are confused about the Committee's next step. As reported in the top panel, about half the dealers expect an announcement of balanced risks, while the rest are split between a tilt toward economic weakness and no assessment at all.

I think that there are three possibilities to consider. First, keeping policy unchanged or easing modestly is unlikely to change materially the evident downside risks to the path of inflation over the next several quarters, and the relative distribution of the risks to sustainable economic growth would remain debatable. If that is the period over which the Committee defines the “foreseeable future,” then it could reassert the old language tilted toward economic weakness on the logic that the weighted average of those risks represents a downside threat to its objectives. However, March’s deferral of a risk statement might make May an appropriate time to drop the statement altogether, the option listed second. That might be particularly attractive if you have been troubled in the past by the misperception fostered by the existing language of trading off economic growth and inflation and the ambiguity attached to the notion of the foreseeable future. In that case, this afternoon’s statement could relate that the balance of risk assessment is no longer seen as helpful in conveying the Committee’s views to the public. On the theory that you can’t beat something with nothing, I’ve listed a third option: The Committee could augment the risk assessment portion of the statement. One possibility would be regularly to include two declarative sentences that describe the risks individually to the goals of price stability and maximum sustainable growth and a third that summarizes the balance of those risks. While this may convey the Committee’s view of the outlook more clearly, it probably would be greeted with bewilderment by some Fed watchers at the onset.

While your deferral in March opened a window to change the balance of risk assessment, you might want a bit more time than available today to deliberate on a matter that will set a precedent. However, the problem that you face is that anything you do today will be read as precedential. That concludes my remarks, Mr. Chairman.

CHAIRMAN GREENSPAN. Questions for Vincent?

MR. HOENIG. Mr. Chairman, I have a question for Vincent. I appreciate the dilemma that you just defined for us. What is your reaction to in a sense abandoning the balance of risk statement and expanding the press release statement to define our position? Does that have merit? How would the market react to that in your opinion?

MR. REINHART. We have heard different things from different market participants. The Bond Market Association met in this room just last week and devoted one segment of the session to complaining about the balance of risks statement as not being helpful. They indicated a preference that we be a little more descriptive in the statement. But I think that would result in

some confusion because right now the balance of risks statement provides the comfort of giving coded words. The problem is that the codes are a limited number of choices, and at least some members have complained that they have constrained your ability to convey what you really think about the near-term outlook. For example, in today's case you might say that plausibly under the language of the last three years, you'd have to state that the risks are tilted toward economic weakness, whereas in fact most of the members have expressed concerns about further disinflation from an already low level. So I think expanding the risks assessment on balance—I hate to use the word “balance”— [laughter] on net would provide more information to the markets and more flexibility to you going forward. But flexibility comes with a cost. You don't have those coded signals.

CHAIRMAN GREENSPAN. The problem basically is that we have been dealing with two issues—the GDP outlook and the inflation outlook. We have defined our balance of risks in a manner that any acceleration in GDP growth would of necessity increase the rate of inflation and vice versa. Now it's very obvious that that economic model is flawed badly. As I will suggest as I expand on Vincent's remarks, I believe the way to handle this is to unbundle the two issues and deal with them separately and at the end weight them for a conclusion. That strikes me as a solution, though not necessarily the only or even the best solution. At the end of the day it may leave members with the conclusion that the simplest thing to do is to bury the whole idea and forget it. I don't think that's the right way to go because I do believe we can convey information about our outlook. But the form that we've been using recently to do so essentially assumes a predetermined relationship, which is that stronger economic growth creates inflation and vice versa. That's based on a very simple model. But the real world doesn't seem to want to conform to that model, and that is creating very substantial explanatory difficulties for us.

MR. HOENIG. I agree with that, and I look forward to your comments.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I have just a comment. We've discussed the probability of deflation quite a bit today, and a lot of attention was focused on the 35 percent probability in the Board staff's exercise. In answer to Tony's comment about the time period used in that simulation, I would note that we did do the exercise beginning in 1985, which is a much more tractable period, and the probability we got was 20 percent as I indicated. It strikes me that both of those exercises suggest that the probability of deflation is higher than I think we're all comfortable with.

CHAIRMAN GREENSPAN. Any other comments? If not, let me move on using a somewhat different approach to recent developments, and I hope that we will come out with some agreement on how to handle a number of issues.

There is no question that the financial data have improved quite dramatically very much across the board. I have in mind not only the narrowing of credit spreads and the dramatic decline in the premiums for credit derivative default swaps but the very significant drop in the level of interest rates on BBB and even higher-yield obligations. The fall in those rates has reduced the cost of capital to a substantial part of the business community, which for a considerable period of time had been blocked out of the lending market by rates that were close to prohibitive for lower-rated borrowers. To be sure, a decline in the cost of capital does not necessarily mean that capital investment will pick up. Such investment depends on the extent to which business executives see real investment opportunities. And in line with what Jack Guynn was mentioning, I suspect that people who are beginning to say in private that they feel a bit

optimistic nonetheless are not inclined to voice their convictions in public because optimism is not at this point the conventional wisdom.

The truth of the matter is that the data on nominal orders and on backlogs for nondefense capital goods excluding aircraft are behaving better than the rhetoric. Backlogs have been rising for the last three months, not significantly but they have turned up. We also are seeing upward revisions to the data. It's a small point, but the revised data on durable goods orders for the month of March that were released on Friday were raised significantly. The upward revision stemmed from data that came in higher than the estimates of unavailable data that had been plugged into the initial report released by the Bureau of the Census. In short, the numbers look better than the rhetoric. That reminds me of what Mark Twain once said about Wagner's music—"it's not as bad as it sounds." [Laughter]

It is clear that we are getting some fairly substantial improvement in the financial numbers—those for the stock market obviously and, indeed, for all the credit markets. While it is true that the markets are being driven in part by improved profit figures, to date they have not been supported by evidence that economic activity is experiencing accelerating growth. The question one has to raise in this context relates to history, which tells us that more often than not, perhaps much more often than not, financial data of the type we have been looking at in recent weeks point to an eventual strengthening in economic activity. That does not happen all the time. There have been occasions when for one reason or another it didn't happen. But the recent financial indicators suggest that the burden of proof is on those who argue that the economy will not pick up. Those who make that argument must presume that there are no significant investment opportunities. I find that most unlikely. Indeed, the expansion of the communications network that was going on prior to the huge decline in capital investment as risk

premiums rose in 2000 was by any measure that we know not completed, and the longer-term outlook for such investment still looks reasonably solid. We also know that considerable advances in productivity continue to be made, and that is telling us that the underlying profit opportunities for new investments have to be there in one way or another.

There's a very interesting question as to whether the most recent anecdotal reports that we heard around the table, which do not indicate any new momentum in the economy since the end of the Iraqi war, are in fact accurate. The Federal Advisory Council met with the Board on Friday, and I came away with the impression—in fact the FAC members said this—that they suddenly are getting a sense of optimism among their business contacts. The reason I find that important is that the banking community has a special window on what their customers are doing well before actual data on their activities become available. I was struck by these comments and by the fact that they came from all twelve Federal Reserve Districts.

This morning Don Kohn got a note from our good friend, Bill Dunkelberg, at the National Federation of Independent Business. They have just run their survey—the data are not yet published, and I don't know when they will be published—and it shows that their index of confidence, which is the overall index they employ, rose 5 points in April. I believe that is a monthly record. It is a huge increase. The report also indicated that the index rose to a level of 100 or not far from where it was in 1999 and in earlier years. In other words, if anything it's close to normal based on longer-term patterns, after being at its lowest level in March since 1993. According to the report, hiring plans jumped substantially. Capital expenditure plans also were up, and plans to add to inventories remained strong. There are 1,400 firms in this sample. Those results don't quite square with those from the Institute of Supply Management, but it is possible in one sense to reconcile them. All of the surveys of the Institute of Supply

Management are taken in the first half of the month, even though the institute waits two weeks to publish the data. So the National Federation results could be an indication that something different has been happening more recently. We don't know yet. These surveys are useful. They're all diffusion indexes. They're not hard data. But they are the first indication that something may be changing.

The data that we have been getting on production and employment have been, just to state it as simply as I know how, awful. We can ascribe the weakness in the employment data in part to the fact that business firms have displayed an extraordinary capability in recent quarters to meet a tepid but still rising real demand for goods and services with ever lower employment. This is another way of saying that the ability to increase productivity is there, but it can't be the result of large capital expenditures because we're not getting such capital investment. My hypothesis—and I frankly don't know whether it is true, but it would explain what is going on—relates to the fact that in the 1995 to 2000 period we had very substantial capital expansion. We had growing markets and very high perceived rates of return on new production facilities as distinct from investments made for cost-cutting reasons. As a consequence, there was an inordinately large emphasis in the business community on investing to expand facilities. A result was that business firms paid little attention to the inefficiencies that invariably arise as they are building new plants, adding new equipment, and revising the structure of doing business. Those inefficiencies build up over time, but if the costs of those inefficiencies are relatively modest compared with the rates of return on new facilities, businesses essentially forget the inefficiencies. What I think has happened is that, when the spending boom ended in the year 2000, there was a cumulative level of inefficiencies sitting there that were available for exploitation with a relatively modest amount of additional investment. That exploitation has

gone on for several quarters. The implication, of course, is that the underlying structural productivity gains from 1995 to 2000 were in a sense actually greater than the published numbers because there were negatives associated with those gains that were not part of the actual evaluations.

This means essentially that going back and cleaning up the barn so to speak is turning out to be a highly profitable activity. The first-quarter earnings numbers are nothing short of spectacular in the sense that, after they were revised up very late in the quarter, they surprised everybody. Now, I don't know whether the gains are being sustained in the second quarter. They still seem to be holding up, but it's too soon to be sure. We do know that there has been a tendency for analysts to revise their forecasts down repeatedly for a quarter as they go through the quarter. They are doing that now but at a much slower pace than is typical, implying that the productivity spillover is still significantly there.

I don't know what the short-term behavior of the economy will turn out to be in terms of the GDP numbers. I do know that, if we look at outside forecasts that are done in very considerable detail on the bases of both working down from the macro data and building up from individual company data, we find that JP Morgan Chase and Salomon Brothers/Smith Barney both have 4.0 percent rates of increase in GDP for the third quarter. So does Goldman Sachs, which has, of course, been on the bearish side of these forecasts. I myself find it difficult to believe that such growth is in prospect because, if it is, that has to mean that by a few weeks from today growth of real GDP estimated on a monthly basis has to move up appreciably or else 4 percent growth cannot realistically be achieved in the third quarter. That forecasters at these three organizations believe that it can be achieved I find somewhat startling. It may be that they are beginning to pick up what the Dunkelberg data are picking up, namely evidence that suggests

to them that something significant is happening that will boost GDP growth. To be sure, the Goldman Sachs numbers tail off after the third quarter, but they're still higher than the second-quarter numbers that we are now looking at, which are not all that good.

In any event, we did get a report this morning of a sharp increase in chain store sales. I don't know how much of the increase may reflect a poor seasonal adjustment for Easter, but it is a very big increase. In fact, in the last four weeks the Bank of Tokyo-Mitsubishi seasonally adjusted weekly index on chain store sales went up $3\frac{3}{4}$ percent, and that rise is not at an annual rate. It's the increase over the four weeks.

The evidence bearing on the economic outlook is a mixed bag at this stage. The difficulty in all of this is that a deflation process may be sneaking up on us. It is not doing so in a way that I anticipated in that, no matter which set of price indexes one uses, the rate of inflation has fallen fairly dramatically during the last six months. Incidentally, the issue I was raising with respect to the owners' equivalent rent was not that the other smaller components of the index are not falling. Indeed, some are falling more, but I'm seriously questioning whether in fact the owners' equivalent rent in the current environment of very rapidly changing homeownership is best proxied by the way the BLS does it. This involves taking a sample of rents on rental properties that have the same physical characteristics as single-family homes. I'm not arguing about the data as such but in terms of whether in fact we are looking at true deflationary processes. Indeed, remember that the 35 percent probability of deflation in the staff baseline forecast includes falling inflation as a consequence of improving productivity. The real issue that we have to get at when we're looking at the notion of deflation is not only what prices are doing but also why they are doing it. An economy in which prices are falling at, say, a 5 or 10 or 15 percent annual rate but where rising productivity is matching the decline such that the

nominal rate of return on capital is stable or rising tells us that we do not have a destabilized economic system. So price declines per se don't tell us very much without advertence to the concurrent rate of return on capital and whether in fact we have a stable environment. Indeed, I would argue that a necessary condition for the type of deflationary problems experienced in the Great Depression is not only a decline in product prices but of necessity a decline in asset prices. If product prices are declining but asset prices are not, the likelihood I would submit is that individual companies may be having pricing problems but they're not having productivity problems. The rates of return are there, and that's the reason that asset prices are high.

I do think we have a concern here. In my view we cannot avoid the fact, as Governor Bernanke pointed out, that we face an asymmetry. We know what to do with inflation when it rises. The Committee has taken action to counter it many times and has succeeded in doing so many times. We haven't confronted the problem of potential deflation in a very long time, and I find that possibility to be something on which this Committee must have an ever-increasing focus. We have to be careful, however, about how we think about this process and make sure that we've got it right and that we're not merely looking at the zero bound issue. This is a far larger issue that involves the mechanism by which the economy functions rather than just how pricing affects products as distinct from assets.

My general view with regard to the policy implications is that we probably would be wise to move the funds rate lower unless we see a fairly substantial pickup in economic activity. I would suggest, however, that it would be a mistake to ease policy today. The reason relates to the issue that several of you have mentioned. I did try, incidentally, during my congressional testimony last Wednesday to open up the possibility that we might ease today. I raised for the first time the notion that falling inflation would be unwelcome, and I did emphasize a couple of

times during the testimony that we, the Federal Open Market Committee, do have further room to move lower. I think reactions to my remarks did briefly lower somewhat the May federal funds rate futures, but the stock market then rallied and pulled back down the probability of an easing action.

The reason I think we have to proceed cautiously is that the recent strengthening of the stock market and financial markets generally, including the narrowing in yield spreads, is a potentially fragile situation because it is not as yet being supported by positive developments in the real economy. So if we were to come out today with an easing move that the market does not expect, the question would arise as to what we in the Federal Reserve know that those in the market do not. Because we are in such an unsettled period, we have the capacity of completely reversing the nascent rise in financial market values. If that rise continues, it will lift the economy with it. As a consequence, I think we need to be careful. I subscribe to Bill Poole's general edict about not trying to fool the market. It doesn't serve our purposes. The ideal monetary policy is to have nothing happen in the market every time we move because market participants have fully discounted our action. That creates the best general environment except for those rare occasions when we want to change the state of psychology. That is what we did in very early 2001, when we went out of our way to move rates sharply lower at a time the market did not expect us to do that. We did it because we wanted to alter general attitudes, but at this point I think we're far better off not to surprise the market. That's largely because, even though a number of us may think that we know how the markets will respond, things happen that we don't expect. I submit to you that we currently are dealing with a very chancy situation, but we are reasonably sure that if we do what the market expects, then nothing will happen. We do not know with any degree of accuracy how the market is going to behave in the event that we do

something one way or the other. Frankly, I don't know how the market will respond if we move the funds rate lower today. But as a commentator in the *Wall Street Journal* said today, if the Fed were to do something the market would respond wildly. The reporter did not specify in which direction. [Laughter] I suspect the reason is that he didn't have a clue, and I can understand that.

In any event, I think we have a tricky policy issue in front of us today. Ordinarily, as you know, our procedure is for the members to express their views in the policy go-around, vote, and then look at a draft press statement. I'd like to do something different today. We've drafted a statement that tries to capture some of these issues. I'd like to circulate it around the table and have it as a point of discussion as members comment on policy. I would appreciate it if my colleagues would distribute the statement. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Thank you, Mr. Chairman. I support the recommendation of no change in the fed funds rate, and I further support the reasoning behind it as evidenced by the statement you have distributed.

CHAIRMAN GREENSPAN. Governor Ferguson,

MR. FERGUSON. Thank you, Mr. Chairman. I also agree with your analysis that there are some straws in the wind that suggest it might be wise to wait. I asked two rhetorical questions at the end of my earlier statement. The obvious answer to "If not us, then who?" is us. [Laughter] The more serious question of the two is, "If not now, then when?" I am supportive of what I think I heard you imply, which is that we have a two-day meeting coming up in June during which we can do lots of things and we also will have seen much more data by then. So I'm interpreting that—

CHAIRMAN GREENSPAN. May I interrupt? I should have addressed this. If the data we're seeing from the Federal Advisory Council and the National Federation of Independent Business prove to be a false dawn, we will know it by the time of the next meeting. And if that should be the case, I think the burden of proof will be on those who think we should not move at that time. The absence of signs of an improving economy at that point would suggest potential deterioration that will require us to respond. I think that's what you were questioning.

MR. FERGUSON. That's the implication I took from your comments, so I'm glad you made that more explicit for the benefit of everybody. As for the risk statement, a number of people served with me on the committee that created the wording of the balance of risks sentence three and a half years ago, but I will take sole responsibility for it.

CHAIRMAN GREENSPAN. It's yours! [Laughter]

MR. FERGUSON. It's mine. When you're the father of something that even at the age of three proves not to be as attractive as you had hoped, you have one of two choices. You can still embrace it because it's yours and wait for it to grow up and become that lovely swan that you expect. Or you can say, "You know, you're not as attractive as we had hoped, and maybe someone else wants to adopt you." [Laughter] This record will be public in five years, and my children at that stage will be old enough to actually have an interest in what their father was saying in this room. They will be teenagers by then, and they will really resent me!

Now, with respect to the creation of the balance of risks language, the then Director of Monetary Affairs and I got together and tried to work out the matrix of what might happen over the longer-term horizon. When we did that, I will admit that I did not see that the U.S. economy would be in a position where we'd have extremely low, and possibly declining, inflation and also expanding growth with a forecast of above-trend growth. So the language that we used—and it

was not his fault, it was mine—didn't fully pick up the type of situation we are in today. So I think what you have proposed in the third paragraph of this draft statement will get us through this period quite nicely. It disentangles the two elements of our dual responsibility. It comes back with a weighted average. I believe it's as clear as can be, and I'm very supportive of it. Overall, I think this is a great statement. And in the context of having a meeting coming up in June, I'm very supportive of your recommendation.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. First, on inflation itself I would certainly agree that, if asset prices are not declining, there is less financial risk than if they were. However, we should keep in mind—though I have to think more about this—that, if goods prices are declining, then the real cost of capital is rising and I think we still have the classic zero bound problem. So it is better if asset prices are rising as opposed to declining, but I don't believe that solves our problem with deflation. I do want to reflect on this more, but that's my initial—

CHAIRMAN GREENSPAN. That would be a very interesting seminar topic because there are various aspects to it.

MR. FERGUSON. Right. I want to agree. But there is a difference between a lower cost of capital where the markets have lowered it versus your point, Ned, which is a low cost of capital because the issue is low versus what. I think you're absolutely right that rates of return depend on a number of factors and not just asset prices. So I strongly endorse your point.

MR. GRAMLICH. My second point is that I definitely don't want to blunder about when markets are fragile. I think we have to be very careful about this whole issue, but we should also recognize that markets aren't exogenous either. Markets are influenced by what we say and do. So if for whatever reason there is not sufficient expectation that we would take a policy action

today, that's fine. But in my view we have to start building the case regarding what we are about in the longer run. So I can go along with the kind of policy that you're suggesting, Mr. Chairman, but I wouldn't go along with you forever on this, and indeed I know you don't want me or anybody else to go along with you forever.

Purely on the statement—and virtually everybody has commented on this today—I think we have to unbundle the risks in the way that this draft statement does. I strongly support that part of your recommendation. I do have to be honest, though, and tell you that I have some qualms about the “taken together” sentence because it's akin to adding up the risks for pears and adding up the risks for apples and putting them together. I'm uneasy about that, but I have no bright ideas for what to do about it today. The proposed wording is as good as anything I can think of today. But if I were placing a bet, I would bet that the language would need to be altered in three years when Roger's swan gets even a little more eloquent and beautiful.

VICE CHAIRMAN MCDONOUGH. If not in seven weeks!

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. Let me start at a little different place than you did, but I'll come back. When I came in this morning, I had been thinking about how to assess the potential costs of lowering rates when in retrospect that proved not to have been necessary or desirable versus the costs of not lowering rates when in retrospect we wished we had done so sooner. I must say that on that calculus I think the costs of delay are greater at this point. It seems to me that if we were to ease policy today and in retrospect that turned out not to have been necessary or desirable, I'd be quite happy. That's because we'd be dealing with a situation in which the economy is stronger than expected and coming along nicely and that would be

occurring in an environment where the inflation environment is very stable. So I don't think the costs of dealing with that would be all that high.

With regard to market expectations, we have quite an unusual situation. I haven't gone back and looked at the data, but I think in our history of recent years it is quite unusual to have a very high probability of a future action built into the market but no action built in for the current meeting. Second, as the first page of graphs in front of us shows very clearly, as of the end of March or early April the market had built in a high probability of a change in May but now has taken that out. So in terms of market expectations, we're dealing with an unusual circumstance. I believe the market is going to interpret the language "The Committee believes that, taken together, the balance of risks . . . is weighted toward weakness" as code, if you will, or a forecast that we are highly likely to cut rates at our next meeting. The question will arise immediately as to whether the cut is likely to be 25 or 50 basis points. That uncertainty will arise and will be discussed right away. So to some extent not acting today but putting in this language will surprise the market in the same way that the market would be surprised by an action today. It's not as if we totally avoid that market surprise.

I view this as a perfectly satisfactory solution because, if the market has a high degree of confidence that a change in rates is coming, in terms of the effects of monetary policy it doesn't really matter very much whether that change comes now or six weeks from now. The term structure is affected almost exactly the same way except for the very, very short-run maturities. That six-week interval can't make any difference for a ten-year bond. So I think this is an acceptable way of making it clear that we are very likely to be easing policy unless we see a lot of evidence that the economy is picking up steam.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support your recommendation and the announcement as drafted largely for the reasons that President Poole just stated. I also would have been comfortable if you had recommended a slight cut in rates and that had been possible given the market situation. I agree, too, that the risk–reward tradeoff is tilted in such a way that I would rather be a little too easy rather than a little too tight, so I'd take my chances on that side. But in that regard I think we do get a lot of benefit from this statement by breaking up the balance of risks. I might note that I don't think Roger did quite as bad a job in constructing the old balance of risk statement as he averred in his statement. To me it didn't quite have the tradeoff in it that you said it did. But the fact that you thought it did and that others were confused by it suggests that it is certainly inadequate to the current situation. So I consider it very helpful to unbundle the risks. I think highlighting the downside risks on inflation will be very beneficial by letting the world know what we are worried about. It reinforces the last paragraph of your testimony and puts that issue on the table more forcefully. I think that will help to influence expectations and to give long-term rates scope to move down if activity doesn't pick up very much and if inflation comes in lower. And I believe that's very helpful.

As to the adding up of apples and pears, I think that's basically what we have to do here at the end of the day. We have to weigh these different factors and add them up. By the way, I like the apples and pears better than the sausage that I used to hear we made around this table. Fruit cup is better than sausage!

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. I support this statement. I would say, perhaps not unlike others, that if we had taken an action today, I would have been a little squeamish. But certainly I understand where the risks are and would have supported an easing. I think unbundling the risks is a very

good idea. In my view, the second paragraph isn't necessarily cast in stone but does give us some opportunity to be more communicative with the public as we move forward. So I'm very supportive of this. One thing I would request is that we think about the agenda for the June meeting sooner rather than later because in light of this statement and our discussion today that will be a real opportunity for us to do some very important planning and discussion.

CHAIRMAN GREENSPAN. I think you're giving instructions to the gentleman to your right.

MR. HOENIG. As a request.

MR. REINHART. Your remarks this morning and those of Governor Bies and others around the table echo the comments I've heard from members over the last couple of weeks in other conversations. So the Chairman has agreed that the special topic at the first day of the June meeting should focus on alternative policy regimes in an environment of very low short-term rates. Dino and I will organize the staff work on the strategy, tactics, and communication policy associated with that. That does crowd out a bit of the background material that the Board staff has prepared on communication policy more generally. What I'll do is circulate that material in a couple of weeks, and I'll ask for guidance when you receive it on whether you'd prefer to tackle the communication policy at the next two-day meeting in January or if you'd like to deal with it piecemeal at meetings before then.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I would like to start off with where I was before I saw this draft statement and then react to the statement. At the risk of some repetition, to me the key policy issue this morning is whether we want to act today to preempt a buildup of disinflationary momentum or whether we want to wait a little while to see if the economy

strengthens and that risk diminishes. As I said earlier, it's an agonizingly close call. It was for me before I saw the statement, and it still is. But on balance the recent improvement in at least some of the data—and you added a few more in your earlier comments—had convinced me that staying where we are was the best way to go. So I favored leaving the rate where it was, reintroducing a bias, and making it a neutral bias. My preference for a neutral bias was based in part on my view that introducing a downward bias at this point could undercut the renewed optimism we're hoping for, for which I think there is still some basis. I don't want to frighten the markets and the public into thinking that the deflation problem, even though it may be more immediate, is greater than it actually is. In this statement we've unbundled the risks in one place but rebundled them in the final sentence of the third paragraph. In a sense this statement still suggests that we have a downward bias; that's the bottom line. I'm not sure I'm comfortable with that for the reasons I just stated.

I was going to suggest something slightly different. Let me just throw it on the table briefly. Clearly, we do need to recognize the disinflation risk one way or another because it's very real. I was going to suggest that one way to do it would be to reiterate in this statement the concern that you expressed—I thought very effectively—in your testimony last week. But in addition to that I would state clearly in the announcement that core inflation is now at the lower end of the range that we are willing to tolerate on any sustained basis. I recognize that this would be a departure from what we've done before and a different kind of departure than we did last time. But that is in fact what we're talking about now, and I think it could serve us well in trying to deal with what is a very difficult policy choice today. A statement like that wouldn't pre-commit us, but it's hard to imagine circumstances in which we would want the flexibility to

allow a sustained inflation below 1 percent. So that's another way of going. I don't know whether I've made it clear or not.

CHAIRMAN GREENSPAN. It is, indeed, another way. But if we start to do that type of statement, we have to be very careful to make sure that we have the actual capacity to implement the goal. Too many times people have said we will not allow X to go below Y or we will not allow some specific thing to happen. That's very forceful if one has a lot of troops to invade the other guy if he is opposed. But we don't have the tools to guarantee certain things. And if we put out a guarantee and fail to follow through, the effects could be really devastating. My bottom line here is that this approach is not something we can do today. I think your proposed revision requires Committee discussion in a far broader context.

MR. BROADDUS. I would just respond, if I may. I know we can't guarantee in any short period of time that we can put a floor on the inflation rate. But I would hope that over any reasonable period of time we could do that with monetary policy.

CHAIRMAN GREENSPAN. Actually, the Bank of Japan thought it could.

MR. GRAMLICH. Just on this debate. Al, I think the problem is that wording the statement the way you suggest actually moves us quite a distance toward inflation targeting. Many people around the table have different views regarding the desirability of inflation targeting. I know where you are. I know where Ben is and where many others are. We should not get to the issue of inflation targeting at 1:00 p.m. at the end of a long meeting. I think it is a quite reasonable issue to discuss in some detail next time. But we can't do it quickly at this point.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me start first by commenting on the statement, which I like a lot. It may not be perfect, but I consider it a distinct improvement so I think we should go with it. As for policy, on balance I agree with you that we're probably better off not acting today. Not only are financial markets fragile, but they can also be fickle. We don't want to do anything that will set them off unnecessarily. I think Bill's and Don's argument is right that this statement conveys much the same sentiment as a funds rate cut. But it's still different from taking an easing action because people in the market know that we're going to be reading the incoming information on the economy, as are they. So I feel more comfortable deferring any action until June depending on the nature of the incoming information.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. So much on the table here! First, with regard to the policy action, obviously I'm not a voting member; but if I were, I could have voted for an easing in policy, and I could have done it on the basis of the concerns you expressed at the end of your testimony last week. That is, we may need a more stimulative stance of monetary policy in the situation of lower-than-expected inflation because policy is less, rather than more, accommodative than we had planned. So, in order to keep the status quo, we might need to ease a bit to take real interest rates to a position that is as accommodative as policy was, let's say, immediately after our last move. I thought that might be a way to explain an easing action—to say that it was more or less an attempt to keep the status quo—that would not affect the markets so directly.

I certainly can go along with your proposal and I understand what your concerns are. On the matter of straws in the wind, the economy is going to grow, so sooner or later we're going to see these little straws. The question is, When are they going to cumulate to be enough to make a difference in terms of an economy that is growing sufficiently to absorb all the excess capacity

that is out there? To me the problem is not that inflation is falling so much as that we have an output gap. The declining rate of inflation is related to that output gap, and I think we ought to be concerned about that gap. Our best guess at forecasting suggests that the gap will remain for more than the next few quarters that are mentioned in the first sentence of the third paragraph of the statement. So, I'm a little uncomfortable with this approach, but I'm willing to go along with it.

I totally agree with you that the balance of risks statement has gotten us into the pickle of too tightly coupling inflation and growth or disinflation and no growth. So I like the idea of splitting them apart. I'm a little troubled by the wording "upside and downside risks to the attainment of sustainable growth." What do we mean by the term "sustainable growth" in the context of that sentence? I usually think of sustainable growth as noninflationary growth, but I don't know what upside and downside risks mean in the context of noninflationary growth. Inflation is going down by all of our best guesses. Do we just mean growth at potential? I don't understand what we mean. You probably do.

CHAIRMAN GREENSPAN. This is not the first time that particular phrase has been argued. The issue basically is this: When we talk about risks to something we have to say what that something is. In other words, just to say the risks are balanced or unbalanced is fine if one knows the base against which the evaluation is being made.

MS. MINEHAN. No debate.

CHAIRMAN GREENSPAN. The point here is that the term "sustainable growth" is a proxy for an expanding economy whose growth is internally sustainable, meaning it does not have in it the seeds of its own demise. Now, one can argue that that is maximum sustainable growth, and one can argue that it won't matter—the difference here is hardly discernible—

whether we're talking about growth of 3 percent, 3¼ percent, or 3½ percent. It's somewhere in that area, but we shouldn't be putting down a number.

MS. MINEHAN. I'm not suggesting that we put a number down. I'm just wondering what we mean by it.

SPEAKER(?). It means what is acceptable.

CHAIRMAN GREENSPAN. That's what we mean.

MR. FERGUSON. As the Chairman has indicated—I'm sorry to talk out of turn without being called on.

CHAIRMAN GREENSPAN. You're called on.

MR. FERGUSON. This concept really is very much about a growth rate that is close to potential. Now, potential growth is in a range that we've never been public about, and I'm not sure we all agree that it's currently somewhere between 3 and 3½ percent.

MS. MINEHAN. Right.

MR. FERGUSON. I believe the staff still considers potential to be in that range, and I think all of us generally understand that that's what we mean here. The reason we've chosen this language is that we've been using these words for a long, long time. They go back to the era of the Humphrey-Hawkins legislation. In my view, it's better for us to stick with those words rather than to say a growth rate about equal to potential because that clearly begs the question of what we think the rate of potential is. The word "sustainable," at least to my ear, has an implication of a pace of economic growth that, as the Chairman suggested, does not contain the seeds of its own destruction. It means growth that is not too slow, which is what we have now, nor so far above potential that we risk a breakout of inflation. Admittedly it's shorthand. But I don't think it's that mysterious that we need to tie ourselves in knots about it today. To make the

point again, this little swan that we tried to hatch a few years ago may need to have some plastic surgery. But I'm not sure that today is the day we ought to look closely at this because what we mean by sustainable growth is not the issue that has tripped us up with respect to this whole concept. At least I would argue that. You may disagree.

MS. MINEHAN. Well, if we're talking about growth that is close to potential and doesn't contain the seeds of its own destruction—i.e., it's not inflationary and is not straining resources—my own view is that there are more downside risks to that forecast in the near future than upside risks. One can debate that, I suppose. There is certainly the possibility of a fall in inflation, and I like the delinking of growth and inflation in this statement, so I guess I can live with it.

With regard to the June agenda, I would hope that we don't talk just about strategies to deal with the zero bound issue. We had an extended discussion of that at a meeting not too long ago, so there is considerable material available to us on that issue, and all of us have thought a lot about the zero bound. We do need strategies, I agree, and we need to think about them in the environment in which we might actually employ them. But in my view it also would be worthwhile to explain the concept that people have raised here. I think President Stern was the first to say a couple of meetings ago that all price declines are not necessarily bad. What does that mean? What is the distinction between disinflation and deflation? What does it really mean to operate in such a low interest rate environment separate from whether we buy securities out on the yield curve or whatever? Are there other factors that we haven't given a lot of thought to that are going to affect us or the economy in such an environment? Maybe that's too much!

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I concur with your decision and support it. I like the idea of splitting up the two sentences. If I were a wordsmith, I'd argue that the "taken together" sentence doesn't need to be there. Let the markets put it together and just indicate what we believe the conditions are that relate to sustainable growth and inflation. If we put the two together, in some sense we are trying to summarize our view of the risks, and we're giving code words to the market. So my preference is to eliminate that sentence, but I can go either way.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. I can support the statement. I like the fact that we've broken out the two risks explicitly in this. I could have voted for a reduction in the funds rate target today because I'm looking at how much the market has moved the fed funds futures rates since our last meeting. The market is pricing in a rate cut; it's just a matter of when. So having been on the other side for a while, I'm inclined to believe that the market would not have been all that upset by an easing action today. But I will go along with the recommendation that we wait to see how future information develops. I look forward to the discussion at the next meeting. As I indicated earlier, I'd like to see us think through what our strategy should be and what signals we want to send as we move into this lower inflation world that we haven't experienced for a long time. I think it will help us to further improve our communication if we have considered carefully our long-term plan to get through this low inflation period. Then we can do another plastic surgery on this swan.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Based only on my reading of the Greenbook and the options presented in the Bluebook, I would have supported an easing today. I am persuaded, however, by the timing question to support your recommendation. I would just like to add one point about executive

sentiment, building on comments made by the Chairman, Vice Chairman McDonough, and Governor Bies. The markets still reward executives who outperform their peers. If we look back at the 1991-92 environment, when a significant amount of downsizing was going on, once that downsizing had been complete there were only two options available to achieve growth—to expand by merger or to expand by additional investment. It seems to me that this time we have seen a great deal of improvement in the efficiency and timing of investment decisions, to say nothing of the decisions themselves in terms of what investments to make. But the margin of error in the timing is even tighter than it was in 1991-92. So coming back to Vice Chairman McDonough's comment about the psychology, once the psychology seems right for businesses to make new investments, I think the pickup in investment could be quite rapid. In my view to do anything at this point to disturb that would be wrong.

With respect to the statement, eighteen months ago when I first joined the Committee I thought it would be pretty easy to improve the statements that we were making. It didn't take me long to realize that every change we made was parsed carefully, so by my second meeting I was very conscious of the desirability of not changing any more words than necessary. However, as in the business world, there are windows of opportunity. Having not opined a risk assessment at the last meeting gives us an opportunity this time to make some changes, and these changes seem to me to be appropriate. So I support not only the statement but also the manner in which we've altered the statement.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. I can support your recommendation, Mr. Chairman. I like the statement and the decoupling of the references to inflation and growth. I would note that there are some potential and logical issues regarding the statement that will probably emerge as we get

more experienced with it. For example, if the two risks are in opposite directions but one is severe and one is mild, would that be a balanced risk or would it be—? [Laughter] Exactly. At some point we may have to deal with this—weighting the two objectives, for example. So I would just point out that we may have to decapitate the swan at some point. [Laughter]

CHAIRMAN GREENSPAN. That's called oranges and sausages.

MR. FERGUSON. We could always vote on our loss function.

MR. BERNANKE. People have suggested that, Governor Ferguson.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I think a good case could be made for a further easing of policy today. The most likely scenario for the economy over the next year or so leaves significant excess capacity in place. With low inflation and the economy in a weakened state, I believe that erring on the side of ease most likely would entail very little cost whereas erring on the side of inaction could be significantly more costly. The cost of inaction could be especially large because we are within range of deflation and the zero bound. Finally, I believe that being preemptive has served us well in the past. Quite frankly, if my recollection is correct, at times our acting in a preemptive manner has involved surprising the markets, and I don't think we've suffered as a result of that.

I also would say that the third paragraph is helpful to me. Let me make a few comments. I never thought when we talked about the upside and downside risks that it was in terms of commenting on sustainable growth. It always meant to me the risks to our forecast of growth—that we saw either upside or downside risks to our projection of growth, not to sustainable growth, which I think is a very different concept. Also the last two sentences help me a bit

because they do point out clearly the issues that I think we ought to be focused on, particularly if we're still interested in acting in a preemptive way. Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Mr. Chairman, I think the decision on policy today is a close call. I could have easily supported an easing today. But as I said in my earlier remarks, I think the fairly dramatic improvement in the financial sector offers us enough promise that it's worthwhile to wait and see for just a bit longer. As for the bias statement, I've been a long-time skeptic of the benefits of having a bias statement. In that regard, I think Roger has been very generous in accepting sole paternity! But since he agrees it's not the prettiest baby he's ever seen, it seems to me that we're missing a very good opportunity, as you put it, to bury the whole concept and forget it. I would take advantage of that opportunity, but failing that I think eliminating the "taken together" sentence would be an improvement at this point.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. I am supportive of the policy recommendation, and I support the unbundling of the two risks. I'm also pleased that the statement acknowledges our concern about deflation by indicating that a substantial fall in inflation would be unwelcome. However, I share some of the views expressed by others about the "taken together" sentence, which rebundles the risks. I am concerned that it will cause the markets to focus just on the fact that we've changed our balance of risks toward weakness. My preference is not to have that sentence in the statement. However, I can support the statement as it's written. And I, too, look forward to the development of a communication method that we all feel comfortable calling a swan.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I support your recommendation to make no policy change today. I actually came in thinking—and I said this to somebody during the break—that the worst of all worlds would be to take no action today and to go back to a balance of risk statement of the kind we ended up with here. I think it was Al Broaddus and maybe Don Kohn who made a point that was quite vivid in my mind—that we need to convey some positive sense about the outlook. To throw a bit of cold water on the way this statement is structured I, like several others—I'm still thinking about this as I speak—believe it might be better to strike that last sentence where we blend the two risks. I know we can't abandon the statement without preparing the public for it. I'm not smart enough and don't have enough time to think about whether or not we can simply drop that sentence. But I'm afraid it does undo some of what we're trying to do today, and that bothers me a good deal.

MR. BROADDUS. Mr. Chairman, could I just associate myself with the preference for eliminating that sentence?

CHAIRMAN GREENSPAN. Is there a general willingness or desire to do that?

VICE CHAIRMAN MCDONOUGH. I don't share that view because, if we take out that sentence, we in effect divorce ourselves from the previous form of the statement before we have an opportunity to discuss it adequately at our next meeting.

CHAIRMAN GREENSPAN. Yes, I think it would be a mistake to pull it out.

VICE CHAIRMAN MCDONOUGH. As do I.

CHAIRMAN GREENSPAN. But if it's the consensus—. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. First, I definitely agree with the policy recommendation not to make a change today. That's in essence what I said in my statement,

namely that we should wait. On the balance of risks issue, I do a mea culpa here. I was on the committee, Roger.

MR. FERGUSON. You were?

MR. MOSKOW. I certainly was, along with Bob Parry and Bill McDonough.

MR. PARRY. But it's your baby! [Laughter]

MR. MOSKOW. I think the language is obsolete now. There's no question that it needs to be changed. We need to eliminate the wording on the risks. I would have preferred to do the surgery on the swan—or whatever the analogy is—outside of this group. I'd suggest that another subcommittee be appointed to do that and to come back to the Committee with a recommendation. For many of the reasons that people have mentioned around the table, I think there will be other iterations of this and we are setting some precedent here, and I think it's something we should consider very carefully before changing.

I actually would propose another option. I don't feel strongly enough to dissent on the statement, but I want to suggest another option because I do have concerns about this statement. My concerns tie in with some of the comments made by Jack Guynn and others. First, I think this statement will surprise the market and will increase the market expectation of a cut in rates. In my view, it comes close to risking the effect on market sentiment that we wish to avoid here. Second, I think it elevates the concern about disinflation significantly. So my preference would be—and to my mind this option would have the least risk of influencing the markets—to go back to our usual format and to say that the risks are balanced. However, I would add the sentence that you put in regarding the unwelcome risk of disinflation. I'd put what you said in your testimony in the statement itself to show that we are concerned about it. But I still would prefer

to have the risks balanced. As I said, I don't feel strongly enough to dissent on it, but that would be my preference.

CHAIRMAN GREENSPAN. It's very difficult to make that judgment. Basically, if our sole purpose were to do exactly what the market expects, what we find is that one-half of the primary dealers who responded to a recent survey expected the FOMC to adopt a neutral statement. The other half were about evenly divided between expecting an assessment tilted toward weakness and expecting a continued deferral of any assessment. So, not all the views were the same. I think we're running out of people who have not commented.

MR. GUYNN. Is a postscript allowable, Mr. Chairman? Not to rebut, but I just want to make a point that there seems to be enough uneasiness about this hybrid statement that I'm uncomfortable with Vincent's notion that we might have to wait until next January to talk about this. I wonder if we can't find some way to get back to a fundamental discussion of the wording of our press statements because I suspect the issue we're struggling with will be with us for a while. We're going to have this problem meeting after meeting if we don't tackle it in June or at least fairly quickly. So I would lobby for quick attention to it.

MS. MINEHAN. Mr. Chairman, I agree with that. And I would like to associate myself with President Moskow's thoughts about appointing a subcommittee rather than waiting to get staff memos and so forth in January. Put a group together sooner rather than later, and let's get to it.

CHAIRMAN GREENSPAN. That seems reasonable. Would you read the appropriate statement on which we will vote?

MR. BERNARD. The vote will be just on the federal funds rate?

CHAIRMAN GREENSPAN. Correct.

MR. BERNARD. The wording is on page 13 of the Bluebook: “The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 1¼ percent.”

CHAIRMAN GREENSPAN. Call the roll, please.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
Governor Bernanke	Yes
Governor Bies	Yes
President Broadus	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Gynn	Yes
Governor Kohn	Yes
President Moskow	Yes
Governor Olson	Yes
President Parry	Yes

CHAIRMAN GREENSPAN. I think the only additional item on the agenda is to confirm June 24 and 25 as the dates for our next meeting. Vincent Reinhart will be in touch with all of you regarding special topics.

END OF MEETING