Meeting of the Federal Open Market Committee on
November 6, 2002

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 Wednesday, November 6, 2002, at 9:00 a.m. Those present were the following:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Bernanke
Ms. Bies
Mr. Ferguson
Mr. Gramlich
Mr. Jordan
Mr. Kohn
Mr. McTeer
Mr. Olson
Mr. Santomero
Mr. Stern

Messrs. Broaddus, Guynn, Moskow, and Parry, Alternate Members of the Federal Open Market Committee

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

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

Messrs. Howard, Lindsey, Ms. Mester, Messrs. Oliner, Rosenblum, Sniderman, 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

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

Mr. Nelson,[1] Senior Economist, Division of Monetary Affairs, Board of Governors

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

Mr. Forte,[1] Senior Technical Editor, Division of Research and Statistics, Board of Governors

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

Mr. Varvel, First Vice President, Federal Reserve Bank of Richmond

Mr. Lang, Executive Vice President, Federal Reserve Bank of Philadelphia

Messrs. Eisenbeis, Fuhrer, Goodfriend, Hakkio, Hunter, Judd, Ms. Perelmuter, and Mr. Rasche, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Boston, Richmond, Kansas City, Chicago, San Francisco, New York, and St. Louis respectively

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

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

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1. Attended portion of meeting relating to the discussion of alternatives to holding Treasury securities in the System Open Market Account.

Transcript of the Federal Open Market Committee Meeting on November 6, 2002

CHAIRMAN GREENSPAN. Welcome. Would somebody like to move approval of the minutes for the meeting of September 24?

VICE CHAIRMAN MCDONOUGH. So move, Mr. Chairman.

CHAIRMAN GREENSPAN. Without objection, they are approved. 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 while ago. The top panel of the first page shows the three-month U.S. dollar libor fixing in black and the three-month deposit rates three, six, and nine months forward in red. Forward rates had a minor roller coaster ride, first declining immediately after your September meeting, rising in mid-October as equities bounced off their October 9 lows, and then heading downward again as the economic data were perceived as pointing to economic weakness. Although much of the decline in forward rates had occurred by October 26, the day of the *Washington Post* article that heightened expectations about a possible ease in policy, the article did strengthen market participants' convictions about the near-term direction of policy. The three- and six-month forward rates both are now trading below cash rates. In the Treasury market, the two-year note moved broadly in line with shifting expectations for official policy. The yield fluctuated widely, going as low as 1.66 percent on October 9 and as high as 2.22 percent around midmonth. The long end of the curve was affected by many of the same factors as the short end, though the long sector once again was probably affected by hedging of mortgage-backed securities (MBS) portfolios.

The middle panel graphs the ten-year yield in blue on the left scale and an estimate of the duration of outstanding mortgage-backed securities—in red on the right scale—since June. Many mortgages had been clustered in the 6½ percent coupon bucket and, with rates falling, these mortgages became attractive to refinance. Hence the estimated duration moved even lower from June to September. To hedge against that shortening of duration, MBS investors could buy Treasuries or fixed receiver swaps, either of which would have at least some impact on yield levels, given the size of mortgage market. As that wave of hedging slowed, Treasury yields suddenly jumped about 62 basis points in mid-October. Some investors, in fact, reportedly overdid their hedging and in mid-October had to sell some of the positions they had just bought. The other factor that had a day-to-day effect on yields—and even an intraday effect at times—was the movement in equity markets. The bottom panel shows one way of looking at this relationship. It graphs the 100-day rolling correlation between the S&P 500 and the ten-year note yield since January 1988. I would note two points. First, for much of this period the correlation was modestly

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

negative, but in late 1997 it abruptly turned positive and, though choppy, has on balance remained positive. Second, the correlation, which was already high, has been increasing this year and is now higher than it was even during September 1998.

The intermeeting period continued to be difficult in the corporate bond market. Investment-grade spreads—shown in the top left panel on page 2—remained elevated, though they are off the peaks they reached a few weeks ago and also earlier this summer. Meanwhile, high-yield spreads—shown in the top right panel—topped 1,000 basis points in early October before easing very slightly. The only other time that index exceeded 1,000 basis points was in January 1991. Fixed-income investors, whether in investment-grade or high-yield securities—most of which are measured against the benchmark index—are in risk-averse mode, after having taken hits in many parts of their portfolios. Another way of looking at the corporate bond market is to take the investment-grade universe and divide the bonds into buckets according to their spread relative to Treasuries. The middle panel shows three snapshots of this—as of October 25 in 2000, 2001, and 2002. The percentage of the investment-grade universe trading at up to 100 basis points over Treasuries has been hovering at about 10 percent over these past couple of years. More than half of the investment-grade issues traded at a spread of between 100 and 200 basis points two years ago, as shown by the tall red bar. That category has now declined to about 40 percent, reflecting in part a migration of credit downwards. But perhaps the most striking development is the proportion of corporate bonds that are still investment grade but are trading at more than 400 basis points over Treasuries. From a small number earlier, that group now makes up one-fifth of the market, as you can see by the tall green bar on the far right.

That higher number reflects mostly the repricing of the debt obligations of some very large issuers, a phenomenon illustrated in the bottom panel. The panel depicts for the year 2002 to date the spreads on the fixed-income securities of four of the largest issuers. All four of these companies have seen a doubling or even tripling of their spreads at times. And while they are still investment grade in name, they are priced as if they were high yield. Because of their high and regular issuance, the bonds of these companies comprise meaningful chunks of mainstream fixed-income benchmark indexes and are widely owned. Now, I should note that not all large issuers have experienced a widening of their spreads. For example, Bank of America is trading at a spread of about 105 basis points, and Citigroup, despite negative publicity, is at about 115 basis points.

Also, while liquidity in the corporate bond market has been episodic, it has shown some signs of improvement recently. Meanwhile, liquidity in Treasury, MBS, and asset-backed securities markets has generally been good throughout the period. Finally, I should note that the level of outstanding nonfinancial commercial paper continued to decline in recent weeks and is now nearly 40 percent lower than it was a year ago. And as we approach year-end, the A1-P1/A2-P2 spreads have begun to widen just a bit, especially for thirty-day paper, but at least so far that widening has been much less pronounced than we saw a year ago.

Turning to Europe on page 3, the top panel graphs the three-month euro deposit libor fixing and three-, six-, and nine-month forward rates. Forward rates, which were trading above cash rates early in the summer, have been steadily declining as forecasts for euro-area growth have continued to be reduced. Forward rate agreements are now trading below cash rates, and the market widely expects a reduction in the ECB's official target rate before year-end, perhaps as early as tomorrow. With Europe's slowdown, euro-area corporate spreads have also widened, although perhaps not by as much as parts of our own bond market. In Europe the widening has been most pronounced at lower quality levels, such as the BBB, shown in the green line of the middle panel. Meanwhile, issuance—shown in the bottom panel—has been falling as in the United States, but the full credit picture in Europe is more difficult to gauge given the greater reliance on bank financing by European companies.

Moving to Japan on page 4, the market there has been on a bit of a roller coaster ride recently, reacting to every little report about the likelihood, timing, size, and speed of the government's plan to clean up the banking system. At the time of your last meeting, the Bank of Japan (BOJ) had just announced its intention to buy equities from Japanese commercial banks. At first, Japanese government bond (JGB) yields spiked higher to about 1.3 percent, but they quickly retraced that rise as the market began to doubt the economic significance of the BOJ's announcement. Then the cabinet reshuffle and the nomination of a new economic and regulatory czar raised the possibility that stronger action might be forthcoming to cleanse the nonperforming loan problem. While that might have been viewed as a negative for JGBs, given the prospect of large government expenditures, in the short run the effect has been to firm up sentiment that keeping money in the banking system is risky. So JGBs again have become attractive as a safe haven. The government's plan, when finally announced, was viewed as rather general and a bit less than was hoped for or expected. With reform on a slower track again, JGBs continued to decline below 1 percent. The last time that JGB yields were below 1 percent was in November 1998. The other development was the BOJ's own announcement on October 30 that it would increase the pace of its JGB purchases and its current account balances target. But that was shrugged off, as much as anything, by the marketplace. Meanwhile, bank stocks fell with the cabinet reshuffle, suggesting that investors in these stocks at least were taking the probability of reform more seriously. The biggest fall in stock prices—the bottom panel—was for stocks of the three large banks thought to be at risk of a government takeover.

Finally, let me say a word on reserves. The chart on page 5 depicts, for each maintenance period, average values for the three basic components of our total holdings of domestic financial assets—that is, for the permanent System Open Market Account, long-term repurchase agreements, and our short-term operations. This chart shows actual or projected values for the one-year period from February 2002 through February 2003, starting and ending at the seasonal trough for currency. Through July 2002, currency growth continued to contribute to a steady expansion of our total

domestic financial holdings, achieved almost entirely with growth in our permanent SOMA holdings. From July to October, the total size of the portfolio generally has been flat, and it even shrank a bit recently. This shrinkage reflected essentially flat currency growth combined with movement in some autonomous factors that added to reserve balances, most noticeably the foreign repo pool. To maintain the total domestic portfolio at the appropriate level, long-term repos were compressed, falling from $18 billion in June to just about $6 billion in late October. Having the long-term repo book allowed us to compress our balance sheet quickly without selling assets from SOMA or engaging in longer-term draining operations.

In upcoming maintenance periods we face seasonal currency growth, and we expect a resumption of seasonally adjusted currency growth to more normal levels. The resulting reserve needs will be met primarily with a buildup of long-term repos. Some resumption of outright SOMA purchases is also planned, but we will proceed with that very slowly for the time being. By the end of the seasonal currency swing, long-term repos will have been built back up to about $16 billion, a level at which we plan to hold them steady for a while.

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

CHAIRMAN GREENSPAN. Questions for Dino?

VICE CHAIRMAN MCDONOUGH. I don't have a question. I have a comment. I think your handling of the account when you had the reduction in holdings was very well done.

MR. KOS. The person responsible [Ms. Perelmuter] is to my left.

CHAIRMAN GREENSPAN. You mean you're deflecting the bow? [Laughter] President Broaddus.

MR. BROADDUS. I guess I'm a little surprised, though not a lot, by the strength of the expectation that we're going to move the funds rate down today. Looking at your first chart, I just want to make sure I understand how that evolved. It appears that expectations began to change sometime around October 20 and that the John Berry article tended to lock in that view. Is that the way you would characterize it?

MR. KOS. Yes, I think you can see that views had already been moving toward an expectation of an easing move. But there's always the issue of how much conviction lies behind

that expectation and the degree of dispersion around it. To some extent what Berry's article did was not necessarily to lock in that expectation but to raise the level of conviction about it. Even if the expectations themselves didn't change, the level of conviction did.

MR. BROADDUS. He sort of iced it, I guess.

CHAIRMAN GREENSPAN. I ought to point out that those of us here in Washington were quite surprised at the Berry article. We don't know where it came from. Berry is very careful, and he usually wouldn't write the way he wrote if he didn't have some conviction about the validity of his information. So my impression is that he had a better source than we know. Further questions for Dino? Mr. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Move approval of the domestic operations.

CHAIRMAN GREENSPAN. Thank you very much. Without objection, they are approved. We now move on to David Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. As you know, we received a considerable amount of information last week after the Greenbook projection was finalized. I am pleased to report that the forecast gods, however briefly, appeared to be smiling upon us. For the most part, the data were very close to our expectations and require little change to our near-term forecast. Real GDP was reported by the Commerce Department in its advance estimate for the third quarter to have risen at an annual rate of 3.1 percent, the same as we had projected. Subsequent data on construction and inventories point to a small upward revision to that figure, on the order of ¼ percentage point, with no implications for Q4.

The broad contours of the labor market report for October also were in close concordance with our projection. To be sure, the decline last month in private payrolls of 29,000 was a bit larger than we had penciled in, but there were noticeable upward revisions to August and September that left the level of employment last month a touch above our projection. The unemployment rate finally moved up, even if not by quite as much as we had projected. Taken together, the picture painted by the October employment data and virtually all of the other labor market indicators that we monitor is one of weakness. Employment gains appear to have stalled out after a brief upturn this summer, and recent readings on initial claims for unemployment insurance suggest there has been little improvement in conditions since the October reference week.

While the data late last week contained few surprises for us, the same cannot be said for the bulk of the information that we had received since the September Greenbook. In fact, a notable feature of the incoming data was the uniformity with which they surprised us to the downside. Production, consumer spending, business outlays, and foreign activity all came in below our earlier expectations. The breadth of these disappointments gave us little reason to discount the news and led us to mark down considerably our forecast through the middle of next year. We project that real GDP will grow at an annual rate of 1 percent in the current quarter and at a pace of less than 2½ percent through the second quarter of 2003—a downward revision to growth of roughly ¾ percentage point at an annual rate over that period. The direct readings on production have not been encouraging. After increasing through early summer, industrial production is likely to have dropped about ¾ percent in October on the heels of small declines in both August and September. Factory output received a sizable boost through the middle of the year from the efforts by firms to stem further liquidation of their inventories. But that impetus now appears to have largely played out, and before any improvement in the pace of final sales has taken hold. Indeed, as we move into the fourth quarter, growth of final sales appears to be flagging rather than gaining momentum.

In the business sector, the recent readings on spending for equipment and software have, on net, been below our earlier expectations. Though estimated outlays for computers *have* run well ahead of our forecast, shipments of capital goods elsewhere have been noticeably softer than we had projected in September. These are obviously noisy data, and caution is warranted in drawing much from their month-to-month movements. But when considered together with the weak output of business equipment in IP and the downbeat reports from firms about their spending plans, we felt a noticeable downward adjustment to our forecast of investment spending was needed to balance the risks to this part of our projection.

Like business spending, consumer outlays also have come in below expectations. Sales of light motor vehicles in both September and October were down more than we had projected. It is difficult to know whether the falloff in sales over the past two months represents only a payback for the phenomenal pace registered in July and August or a more fundamental weakening of demand. We have assumed that at least some of the shortfall represents a signal of softer underlying demand and accordingly have marked down our projection of auto sales and production over the next few quarters. That said, given the economics of the labor contracts in this industry, we think that production of a bit under 12 million units at an annual rate is about as low as the auto companies will go in the near term, barring some more serious shock to demand or costs. Non-auto spending also has been disappointingly weak of late. Real PCE excluding motor vehicles was about flat in August and September. And while the weekly data on chain store sales leave a great deal to be desired in terms of predictive content, their recent weakness lines up well with the souring of consumer sentiment and anecdotal reports suggesting that consumer spending has remained sluggish.

The only exception to the string of downside surprises that we experienced over the intermeeting period was in housing. Starts of both single-family and multifamily housing were far above the level that we had projected for September. Although the adjusted permits data suggest that those figures probably overstated the jump in activity, sales of new and existing homes showed considerable strength as well, and reports from the builders have remained very favorable.

With the downward adjustments that we have made to our projection, the economy does not really break out of the recent pattern of sluggish growth until late next year. Still, we do expect several factors to result in a very gradual improvement. For one, according to our models, the restraining effects on consumer spending of the steep declines in household net worth are at their maximum from now until early next year. Thereafter, the drag from the wealth effect should begin to abate. Next year, federal fiscal policy is projected to provide another boost to aggregate demand that is only partially offset by the ongoing difficulties at state and local governments. And with the real federal funds rate below the estimated range of its equilibrium, we expect that monetary policy will be supportive of a gradual pickup in the pace of activity.

One other component of our story is worth mentioning. We have assumed that there will be a gradual lifting of the uncertainty and pessimism that currently appear to be afflicting the business sector and that are reflected in cautious hiring and weak investment. Unfortunately, we don't have reliable measures of business sentiment. But we have observed that the growth in spending on equipment and software has been running well below the fundamentals, at least as quantified in our models by the cost of capital and expected sales and profits—a pattern consistent with reports of business caution and concern.

In response to the recent data and the continued gloomy reports, we have held the growth of investment spending below that projected by our models into next year. We then allow most of that unusual weakness in spending to dissipate by late 2003, and this, in turn, gives a lift to business investment and to overall GDP. While this might seem an arcane bit of forecasting detail, it matters for our projection. And whether one characterizes this feature of the forecast as a regression residual, as business confidence, or as animal spirits, in actuality it is a measure of our ignorance, not our knowledge, about the factors driving the outlook for business spending.

As usual, there are various risks on both sides of the projection. We highlighted several of those in the "alternative scenarios" section of the Greenbook. Rather than review those possibilities this morning, I thought I would take a few minutes to talk about some less likely but more consequential risks in the outlook. Specifically: What is the risk of renewed recession? How likely is it that we could enter a deflation? And, by contrast, what are the chances that we are at the front edge of a much more vigorous recovery than we are currently projecting?

Let me begin with the risk of recession. As I noted earlier, industrial production has fallen over the past three months, initial claims for unemployment insurance have moved up noticeably, on balance, in recent weeks on our alternative seasonals, and sales of light motor vehicles dropped off sharply over September and October. We have read these data as suggesting a paltry gain in real GDP of 1 percent at an annual rate in the current quarter. It probably could go without saying that any reasonable confidence interval around that forecast would include a negative number.

But what about a cumulative contraction in activity with the depth, duration, and dispersion that would qualify it as a recession? Clearly, the odds have risen over the past few months. An appreciable shock to the economy—for example, another leg down in the stock market or a spike in oil prices—could without too much difficulty trigger a downturn. But barring such a shock, several factors would seem to be holding down the odds of recession. For one, some of the major imbalances that contributed to the contraction in activity last year have been reduced or rectified. If anything, inventories appear to be on the low side relative to sales, and the steepest contractions in capital spending now appear to be behind us. Moreover, while pervasive caution by businesses may be restraining spending, that cautious behavior also is probably providing some measure of protection against the reemergence of imbalances that could later lead to a more pronounced downturn in activity.

What about deflation? In our forecast, core PCE prices increase at an annual rate of about 1¼ percent over the forecast interval. Given our estimate of the bias in this measure, a reading below ½ percent per annum would constitute actual deflation. As we noted in our July presentation, your success in stabilizing inflation, and with it inflation expectations, appears to have made price inflation less responsive to the output gap than it has been in the past. As a consequence, moderate errors in our output forecast have relatively minor implications for our inflation projection. But we also noted that many other factors—for example, exchange rates, energy prices, and productivity— are, at times, important in shaping the inflation picture. Stochastic simulations of our model, which take all of these influences into account, suggest a 25 to 30 percent chance that core PCE inflation could fall below ½ percent either next year or in 2004.

Finally, we do not believe the outsized risks to our forecast are wholly on the downside. What is the possibility that we could be on the verge of a much more vigorous expansion—one that drives the economy beyond its estimated potential by the forecast horizon? We have made a rather sizable downward revision to our projection on little more than a month's worth of information. Moreover, the stock market has shown considerable strength in recent weeks in the face of what we viewed as disappointing economic data. The animal spirits that appear to be inhibiting business spending could evaporate more rapidly than we have assumed, especially if the stock market were to remain on a pronounced uptrend. Therefore, we cannot rule out that, with the real funds rate assumed to hold close to zero for the next two years, at some point a much sharper rebound in activity could develop.

Of course, another upside risk to the projection in real GDP is that the growth of productivity remains stronger than we have projected. But if that risk were to materialize, faster growth would likely also be accompanied by lower inflation and less pressure on the economy's resource base. As a consequence, the policy implications would be quite different from those associated with much stronger growth generated solely from the aggregate demand side of the economy. That is, the funds rate, at least for a time, would need to be below, rather than above, the baseline. Karen will now continue our presentation.

MS. JOHNSON. The contour of the staff forecast for the rest of the world mirrors that for the U.S. outlook—a downward revision in the near term relative to last Greenbook, followed by some acceleration in 2003 and 2004. We are expecting the swing in growth abroad on average to be somewhat damped relative to the U.S. pattern. We see foreign growth slowing in the current quarter, but exceeding U.S. growth this quarter and during the first half of next year, and then strengthening over the remainder of the forecast period, but falling short of U.S. growth in 2004. The similarity to the U.S. path in part reflects the implications of developments in the U.S. economy for other regions of the globe but in part also reflects our reading of signals from within those regions of changes arising there.

A significant contribution to global slowing arising abroad is that from the euro area. A variety of recent indicators, including industrial production and consumer and business sentiment, have persuaded us that output growth in the euro area is slowing rather than edging up, as we had projected in September. The disappointing pace of activity in turn is adding to the problems posed by the fiscal stance in several of the EU countries, including France and Germany, and the standards for fiscal deficits set in the Stability and Growth Pact. Weaker-than-expected activity is reducing tax revenues and adding to the actual government deficits, including pushing the German deficit above the 3 percent limit. Understandably, the national governments do not wish to take procyclical fiscal policy actions that would slow their economies further. At the same time, ECB officials, having stressed the importance of fiscal discipline for each member of the euro area, are faced with the choice of easing monetary policy despite rates of inflation through September above their 2 percent ceiling. The debate has raged publicly in Europe, and it now appears that the needed structural adjustment of some budgets will be pushed off into the future. Nevertheless, the staff forecast incorporates the assumption that fiscal policy in the euro area will remain mildly contractionary over the forecast period. However, with the economy softening and future inflation likely to recede, we have incorporated into the baseline forecast the assumption that the ECB will cut its policy rate by next spring.

On balance, the picture for the euro area is one where domestic spending has failed to establish any momentum, as investment spending contracts further and consumer spending expands only slowly. Uncertainties about near-term prospects for oil prices, the global economy and so export demand, and geopolitical tensions continue to weigh on confidence. Fiscal policy is caught between agreed medium-

term goals and the macro policy needs of the near term. And monetary policy for now appears to be on hold. Going forward, business spending should start to expand, with inventories now well below last fall's peak and capital overhang less of a problem in Europe than here. As global oil prices come down and euro area inflation drops, consumer confidence should firm, and clear scope for monetary easing should emerge. But we readily admit that, whereas evidence of current weakness is clear, our forecast for a rebound next year is far less certain.

Our outlook for Japan is another instance where we have revised down the forecast based importantly on developments within that economy. Some signs of strength earlier in the year reflected demand for Japanese exports. But that stimulus has so far failed to result in positive investment spending or to boost the pace of consumption spending, as had been widely expected. In addition, new uncertainties have been created by the appointment of Takenaka as head of the Financial Services Agency and by the roller coaster nature of the announcements concerning his plans for more forceful handling of the problems of the financial sector. In light of the repeated postponement of making public specific details of what will be done, we have put only very marginal, negative effects from the set of recent policy initiatives into this forecast. We judge that the near-term effects of an ambitious reform program would be, on balance, even more negative; but we are not persuaded by what has been revealed to date that such a program will in fact be implemented. In light of new data and the diminished prospects for Japanese exports, we have revised down our outlook for GDP growth in Japan but have retained a slight upward trend in growth starting by the middle of next year.

The emerging economies in Asia have been leading the recovery in global economic activity, and economic expansion in that region remains robust. We have adjusted down a bit our projection for output growth there during the second half of this year, but that change largely reflects developments elsewhere and some moderation of the very rapid pace of real output growth recorded for the first half. Domestic demand in those economies remains solid, but many of them are importantly dependent on exports, especially from the high-tech sector. Accordingly, our baseline forecast is for growth in that region to remain quite strong, outpacing that elsewhere around the globe. Should activity in the United States or the global economy more generally falter, however, emerging Asia is vulnerable. The resulting loss in export demand would likely undermine domestic investment spending as well and result in significantly weaker growth of real GDP.

Canada and Mexico remain strong performers on the global scene, and domestic demand in their economies has been robust. Nevertheless, their ties to the U.S. economy, including through such important sectors as autos, are so strong that we see them as largely reflecting or sharing in U.S. developments.

Finally, let me mention South America. Events there are clearly driven by economic and political developments within the major countries, especially Argentina and Brazil but also Venezuela and others. Market reactions to those developments,

however, do depend in part on global appetite for risk and general concerns about uncertainties more broadly. Following the election of Lula as president of Brazil, markets have initially tended to move in a favorable direction as his statements and actions to date have been reassuring. However, spreads on dollar-denominated Brazilian debt remain above 1,700 basis points, and the interest rate on roughly half of the government's domestic debt now stands at 21 percent. At such interest rates, the debt burden in Brazil will eventually overwhelm the economy. Both the private sector and the government will need to access financial markets for sizable amounts of funds in coming months. Thus it seems premature to draw any conclusion about whether Brazil's government will avoid a need to restructure the terms of some portions of its debt over the forecast period. It appears that spreads would have to decline further and that the currency would have to strengthen for a truly benign outcome to occur. In Argentina, meaningful resolution of economic policy and progress on restoring growth seem to be on hold until elections are held next March. And even that date for elections is clouded as a dispute continues over conducting primaries. In the meantime, negotiations with the IMF are proceeding in an effort to prevent an actual default by Argentina on its obligations to the international financial institutions. The deadline for avoiding a default is the middle of the month. The IMF and major creditor governments have asserted that they will not approve a flawed program, so some basic issues need to be resolved with Argentine officials. That may or may not prove possible. Although we regard the situation in South America as serious, with important implications for the economic and political stability of that region, we do not judge the stagnation or low growth in the region as having a major impact on real output growth elsewhere. South America is vulnerable to slowdown in the United States and the euro area, however. And a major financial disruption in Brazil could have repercussions on global financial markets. That completes our remarks. We'd be happy to answer any questions.

CHAIRMAN GREENSPAN. Questions for our colleagues?

MS. MINEHAN. Mr. Chairman, I have a question for Dave. You described your numbers on equipment spending as—maybe this isn't the term to use—shots in the dark to some extent. At least that's how I interpreted it, though that's probably playing fast and loose with what you really said. But what I've been struck by in the Greenbook and in our own forecast is the strength of such spending, particularly in the computer area. The actual numbers for the third quarter involve something like a 30 percent growth rate for computer expenditures, and a 40 percent growth rate is embedded in the forecast. That is so at odds with what business people tell us they're doing and the downbeat nature of their comments. I'm going to talk a bit about

some meetings we've had with software executives and officials from large companies in reference to their plans for equipment spending next year. We don't hear anybody telling us that they're doing much of anything. Maybe that just means that there's such a huge amount of computing equipment out there that the replacement that's going on is producing those figures right now, given the year-over-year contrast with 2001. But even the language in the Greenbook has a more hopeful cast to it than what I hear from anybody I talk to who is out there actually spending money for business equipment.

MR. STOCKTON. I'd say a few things about that. First of all, there is some question about the data themselves. Our industrial production measures of the output in that area don't suggest as much strength as is included in the M3 data [manufacturers' orders, shipments, and inventories] that are used to construct the national income accounts and that I mentioned in my briefing. That's one reason for our leaning in the direction we did; we think maybe that M3 data will begin to show something that is more in line with what we're seeing on the production side. So there's some question about what exactly has happened. Two, I think the replacement demand story is very important on the computer side. There are a lot of computers, and they depreciate very rapidly. There has been some extension of the service lives of such equipment over the recession, with companies making do longer with what they have. But once that lengthening stabilizes, we will see an uptick again on the replacement side. And that is an important factor in our outlook.

MS. MINEHAN. But when you ask a question about that, everybody in business says that the equipment is just fine and we're making it do more than we ever made it do before.

MR. STOCKTON. Right. Still, it is true that a lot of units are being shipped. Despite the fact that one hears those stories, there is actual evidence of sales. Numbers of boxes are leaving factories, and somebody is purchasing those items.

CHAIRMAN GREENSPAN. Incidentally, the story about the lengthening out of the time firms are employing these pieces of equipment is important only if the rate of change remains stable. Those stories can very readily be consistent with a dramatic decline in how quickly the lengthening stops. And that will engender, as Dave says, a pop in the output numbers. So I think there are problems on both sides of this rhetoric.

MS. MINEHAN. Yes.

CHAIRMAN GREENSPAN. The business community seems to be a little sloppy in the way they evaluate their investment spending. And I think there are serious questions as to what Census does with those M3 forms. Remember where the M3 forms originate. They are filled out by plant managers at the plant level on the shipments literally going out of the plant. Those are very hard data. The only problem with the aggregate data is that Census adjusts those numbers, and it's never terribly obvious how they do it.

MR. STOCKTON. I'd just mention one other thing. Obviously, it's an area of very substantial price declines, too. So capital spending budgets in nominal terms, which is what we mostly hear about, are weaker than what we would translate into real terms. None of this, I think, completely resolves the tension that you are pointing out here, President Minehan. That's why in this forecast in particular we moved more in the direction of a weaker projection of investment spending for a longer period of time than might be suggested by a reading of our models. But whether we've done enough of that, I don't know. In one of the alternative simulations we presented in the Greenbook we showed an example of what would happen if we

got no improvement in investment spending over the course of 2003 relative to what we've already had in 2002, along with some ongoing weakening on the consumer side. Obviously, that's a much weaker picture if we accept those assumptions fully.

MS. MINEHAN. Right.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Dave, in the near-term outlook in the Greenbook, especially through the middle of next year, inventories are very lean. As a matter of fact, I think the inventory–sales ratios reach historically low levels. Have you given any thought to how large and how likely the upside risk to the forecast might be if inventories were actually larger than those assumed?

MR. STOCKTON. You're absolutely right that our forecast, in essence, is predicated on an ongoing decline in the target inventory-sales ratio. We would expect that ratio in some sense to continue to get lower and lower over time as businesses manage inventories better. And quite frankly, our inventory projection actually has inventory investment a little stronger than a literal read of our models would suggest because we think those models don't incorporate the more rapid pace of adjustment of inventories to target ratios than used to be the case. The models, obviously, are estimated on the basis of historical data that involved slower adjustments. So we think there could be some risk that we're too strong on the inventory side. But if we were to get a more pronounced move back to an equilibrium or target inventory-sales ratio in relatively short order, I think we could see another lift to activity similar to what we saw earlier this year. So we could get another pop coming from that. Businesses report in fact that they're running with relatively lean inventories. But I think it would take a positive sales surprise at this point to actually move them in the direction of wanting to add to inventories more aggressively—either that or perhaps some sign that commodity prices were picking up more

significantly. Businesses seem to be fairly comfortable, given their degree of caution, running with relatively lean inventories. But as you know, this is an area of the forecast in which we have not always covered ourselves with distinction. I'm talking in terms of our ability to predict either the inventories themselves or minor changes in the sales outlook, which obviously get amplified in their effect on the overall forecast through the inventory channel. So I think there certainly could be some upside surprise there as well.

MR. PARRY. Thank you.

CHAIRMAN GREESPAN. President McTeer.

MR. MCTEER. David, over the past year of presumed recovery, employment as measured by the establishment survey is down slightly, I believe. There's been negative employment growth over that year. Yet the household survey has employment up about a million, at least enough to hold the unemployment rate fairly constant. This seems like an unusually large divergence in those two series. Have you looked into what is going on?

MR. STOCKTON. Yes. Actually, there are quite frequently very large discrepancies between the two series. As we talked about at the Board meeting on Monday, it's quite rare to see them line up very well over any considerable period of time. So we're always trying to explain why one is stronger than the other, usually not too successfully. Our basic view is that the establishment survey is probably giving a better read on the current state of labor markets. It appears to line up much better with the weakness that seems to be evident in initial claims for unemployment insurance, with perceptions by households of the state of the labor market, and with business reports on how easy or difficult it is to find workers. So we feel reasonably comfortable taking most of our signal from the establishment rather than the household survey.

CHAIRMAN GREENSPAN. In recent months, housing starts have come in above expectations fairly persistently. Is there a possibility that we are underestimating the degree of immigration as we did in the previous decade? In other words, the boom of 1995 through 2000, which put the expansion of the U.S. economy well above that of other nations, explains the strength of our immigration. Our economy is still running ahead of them. Is it plausible that we're miscalculating the strength of our population growth and hence the growth of households?

MR. STOCKTON. That certainly is possible. I actually don't know whether or not our experts would think that we've been missing something recently on immigration. As for the surprising strength in housing activity over the past few months, I would just note that household formations are extremely elastic with respect to overall economic conditions. We probably would not view immigration as an important determining factor over short periods of time. So, if we were to analyze our forecasting errors, I don't think we would be giving much weight to unexpectedly strong immigration to explain, let's say, the experience of the last three or four months. Now over a longer period of time, obviously, underlying demand would be a factor as it has been in the past when the source of the problem was a population mis-estimate. So it certainly would line up in that direction.

VICE CHAIRMAN MCDONOUGH. Could I comment on this issue? The immigration experts are virtually all in agreement that if a country has a toughening up of legal immigration, which we've had since September 11, illegal immigration just increases accordingly. So the likelihood, therefore, of immigration being stronger and creating more housing demand than the official data would indicate I think is greater.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Could I ask Dave a question? Suppose it's true that there is extra immigration? Wouldn't that tend to show up in the employer survey and not the household survey?

MR. STOCKTON. It could, if it were actually measured.

CHAIRMAN GREENSPAN. It could, but it won't show up.

MR. GRAMLICH. It won't show up in the household survey, we know that. But whether it shows up in the employer survey is not clear to me.

MR. STOCKTON. It depends on whether they affected that survey to a substantial extent.

MR. GRAMLICH. So it's hard to see how it would resolve Bob's question.

CHAIRMAN GREENSPAN. I wasn't raising the issue in terms of Bob's question. I was raising a second question relative to the demand for housing in a very broad sense. Incidentally, with the very latest revisions in the third quarter, what is the nonfarm productivity number now?

MR. STOCKTON. We'd now be looking at a third-quarter figure of about 4 percent.

CHAIRMAN GREENSPAN. Four point zero percent?

MR. STOCKTON. Yes.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. My question arose before the housing discussion started, but let me just comment briefly on housing. Part of what may be going on in that sector is the "tear down" phenomenon. A lot of housing starts come from tearing down perfectly good houses in neighborhoods like my own and replacing them with McMansions. I think we see that happening in the close-in suburbs all over the country. I've heard that it may account for perhaps

300,000 housing starts on a national basis, which is really an enormous number. In other words, these starts are not producing new units.

CHAIRMAN GREENSPAN. Yes. We do get demolitions data on a very delayed basis. And it is true that, if we took the change in the stock of housing, which unfortunately is tied to the population survey—it's the so-called vacancy rate survey—and we used the gross additions, which include mobile homes obviously, we would in the past have gotten a fairly significant amount of implicit net scrappings. The most recent data don't show that. They show very little. So there is either a statistical discrepancy here, or something different is going on about which we will not get a real understanding I guess until we see the 2010 census of housing, which will be published in 2012! [Laughter]

MR. POOLE. In the pre-FOMC briefing, at the end of the charts and tables, chart 3 listed four items that are affecting the longer-run outlook. The fourth one is that "the gloom that currently is a restraining influence on business expansion will gradually lift next year." I have the sense that we are relying more on that than we usually do. Following along from Cathy's question, it seems to me that we know about a lot of individual sectors where there's really a great deal of retrenchment taking place. Obviously structures are one; we're not going to see a boom in structures. It will be quite a while before we will see that sector and others such as air transport, airlines, or aircraft coming back; they are all going to be in a retrenchment phase for a long time. We'll see parked aircraft brought back from the desert before we see the building of new aircraft. Power plant construction seems to have been revised down; because of the scale of power plants, the construction involves a rather substantial amount of investment. It seems to me that, if we're wrong about this assessment on the gloom lifting, then clearly the economy is going to be a good bit slower than we'd like. Relying on that—"animal spirits" is what Keynes

called it—as the basis of the forecast concerns me. I understand why it is in there, and I don't have anything better to offer, but I am very uneasy that that's where we are.

MR. STOCKTON. Let me just say a couple of words about that. One is that some of the things you mentioned in terms of factors that are likely to be weighing on investment are incorporated in this forecast. You may have seen on chart 4 in that presentation that we indicated we're expecting aircraft investment—for exactly the reasons you laid out—to be very weak throughout the forecast period, and that's true in manufacturing as well. We're expecting ongoing declines in investment in that sector and growth in capacity that for a second year will be the weakest on record since we have been constructing capacity measures. So that process is operating in the background in our forecast.

But on the broader issue of relying on this gloom to lift, one reason I wanted to raise that in my presentation was that in fact it is quantitatively important in our outlook. Indeed, if we were to hold the residuals on our investment equations at the levels recorded over the last couple of years, we'd have the unemployment rate basically holding constant over this forecast period rather than coming down as it does. Obviously, a consequence would be somewhat lower inflation as well. So it is not an inconsequential feature of the forecast, whether we call it animal spirits or business confidence or something else. Of course, it's possible that our model is misspecified—that there's some unidentified feature driving investment that we're not capturing well and that could persist throughout the forecast period.

The way I'm looking at the forecast is that the animal spirits component of it is diminishing over time. I say that simply because, if one looks at the residuals in those equations, big gaps don't last forever; they tend to fade away. So in some sense we're relying less and less on animal spirits in this forecast. But that expected diminishment is an important feature in the

pickup that we're showing here. And I don't have much more to offer on that. Unlike the household sector, where we get some independent measures of sentiment or confidence against which we can judge developments, we really don't have statistical measures to rely on as to whether sentiment is improving or diminishing on the business side.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. This follows up on Bill's comment from a little different direction. In light of the animal spirits discussion, the alternative scenario in the Greenbook labeled "lower funds rate" seems to produce a fairly optimistic outcome. I don't know if you adjusted your model or just allowed it to run in that instance to get the reduction in unemployment and the pickup in growth. My concern is, given the overhangs in capital and the capacity issues, whether that is really a very reasonable outcome to project. In the context of a weaker scenario, perhaps we would find less of an effect from that action.

MR. STOCKTON. That particular scenario makes no different assumption about the way animal spirits evolve than does the baseline forecast. So, the strengthening in that simulation—from the 50 basis point reduction in the funds rate relative to the baseline—operates through all the usual channels by which we assume monetary policy works. It works through interest-sensitive spending, more housing, and more capital equipment spending. It works through a somewhat higher stock market and a somewhat lower dollar. Obviously, if you thought for some reason that the change in the funds rate would not be operating through those channels—

MR. HOENIG. Or not operating as strongly through them.

MR. STOCKTON. —or not as strongly through those channels, you would want to temper the results there. Now, I don't believe there's necessarily any strong reason for thinking

that the interest sensitivity of spending at this point would be very different than what is picked up in the historical averages. While we talk about capital overhangs, and indeed there are some sectors in which capital overhangs clearly remain, we do have $1.2 trillion worth of investment occurring in this economy right now. That must mean there are many people who are still on the margin and for whom a lower cost of capital might "crowd in" a bit more spending. A lower cost of capital might allow some further improvement in the structure of both household and business balance sheets. We're certainly not seeing any difficulties getting more housing construction. There appear to be construction workers; there is land to be developed; there is lumber to be used. That channel seems to be operating. So, I'm not uncomfortable with that baseline. But I recognize that one could be concerned about whether it overstates or understates the sensitivity of the economy to policy changes going forward.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. I have a question for David about table A in the extension of the Greenbook forecast. On prices, you have the core PCE declining through 2007 and then ticking up only slightly after that. It's really an extraordinary performance—if we were concerned about inflation at any point over that period. I was wondering if you had run any scenarios to see what it would take for us to be concerned about inflation again over this extended period of time.

MR. STOCKTON. Well, to me one of the simplest ways to think about this is in terms of the probability of deflation, which I mentioned in my briefing—meaning that we get inflation roughly ¾ percentage point below our current forecast. As I said, the model suggests that those odds are somewhere in the 25 to 30 percent range. I think the odds are reasonably symmetric, so one could expect a 25 to 30 percent probability that inflation could be ¾ percentage point higher, which would be around 2 percent. Now, whether one would consider that to be an inflation

problem or not, I leave for you as the policymakers to judge. But that gives you the sense that there are big confidence intervals around our forecast.

By the way, I would certainly encourage you not to think of those extended Greenbook simulations as forecasts. They are in some sense constructions using the model. But our confidence interval around our forecast for 2004 is huge. So if you were to ask what the confidence interval is around a forecast out to 2008, I'm not sure the universe is wide enough, [laughter] but it is possible to generate scenarios that would include a noticeable deterioration of inflation.

Certainly over the near term, it seems as if a real breakout on the upside in the inflation outlook would take some doing. It's not quite so easy to see, especially given how stable inflation expectations are, that we could get serious erosion in what people think the FOMC's longer-term inflation objectives are and, therefore, that inflation could deteriorate a great deal over the shorter-term forecast period we're showing in the Greenbook. There is certainly always the possibility; a central bank can always generate inflation if it tries hard enough. But I'd say it's difficult to see that being an issue over the next eight quarters.

MR. MOSKOW. Thank you.

CHAIRMAN GREENSPAN. Further questions? Who would like to start off our roundtable? President Parry.

MR. PARRY. Mr. Chairman, Twelfth District economic activity has expanded further recently, but the pace of growth is sluggish, and the District appears to be pulling down growth in the national economy. After showing solid gains in the previous month, consumer spending fell in September as households cut outlays on automobiles and smaller retail items as well. Home sales and construction activity have remained at high levels, but signs of cooling are

cropping up, including a sharp drop in the pace of existing-home sales in California during the third quarter.

Conditions in the District technology sector have weakened recently. Job cut announcements by industry leaders HP and Sun Microsystems, and a mixed financial performance in the sector as a whole, suggest that the industry continues to struggle. However, there are a few bright spots. Recent strong financial performances of Microsoft and Internet-based companies such as e-Bay, Amazon, and Yahoo indicate that the Internet and computer services shake-out may be largely complete. This development and the focus on leading edge manufacturing imply that the District tech sector is well positioned to participate in an eventual recovery in demand for tech products nationwide. Boeing's problems are likely to be longer-term because of weak travel demand and gains in market share by Airbus. Although Boeing has nearly achieved its originally planned cuts of about 20,000 jobs in Washington State, it recently announced that a further weakening of expected sales will require additional job cuts next year.

After a volatile and frequently bitter month at West Coast ports, longshore workers and shipping companies found common ground last Friday, tentatively agreeing on the introduction of productivity-enhancing technology. The logjam broke when both sides relaxed some of their prior demands. Under the compromise, shipping companies get to invest in labor-saving cargo-tracking technology, potentially eliminating 600 union jobs. However, they will have to retain current workers displaced by these technologies and give the ILWU the jurisdiction over any new jobs created by the investments. Actually, I think the number of new jobs created by these investments is probably going to be about one-tenth of the number of jobs displaced by them.

CHAIRMAN GREENSPAN. That agreement has not been ratified yet, has it?

MR. PARRY. No, it has not. But both sides made concessions to reach an agreement on technology, and that has been the major stumbling block. There are other issues, but that's the major one. Although talks still could break down over pensions and arbitration, clearing the technology hurdle substantially eased tensions between the two parties. That being said, operations at West Coast ports have yet to return to normal. The pace of work remains well below capacity at ports throughout the West. And in some ports, the backlogs of container ships have hardly shrunk at all since the workers returned in early October. This is particularly true at LA/Long Beach, which of course is the largest port. Only the port of Seattle has completely recovered from the lockout, having no ships queued in the harbor at the present time. More generally, congestion, truck and railcar imbalances, and periodic work disruptions have delayed deliveries and shipments and boosted freight costs for many District businesses. Companies have reported that deliveries and shipments are running one to four weeks behind schedule. The largest delays are for automobiles moving through the ports of Los Angeles and Long Beach. Ongoing disruptions have prompted some retailers to accelerate their shipment schedules in order to get merchandise in stores for the holiday sales season. In a preemptive move, Target stores reportedly chartered a ship in Asia in mid-October and moved cargo to be sold in the December holiday season through the port of Seattle. Target usually would ship through Los Angeles and Long Beach three to four weeks before it needs to have the goods in its stores. With shipping problems continuing, we are hearing many reports of congestion fees for the use of ports, rising truck and warehousing costs, and the near doubling of airfreight charges for new clients.

Turning to the national economy, obviously recent data have been disappointing. The 3.1 percent growth rate for third-quarter real GDP was not very encouraging, given the large

contribution from the temporary surge in autos. Moreover, both business investment and personal consumption expenditures weakened as the quarter progressed, even outside of motor vehicles. And, of course, the October employment report provided little reason to believe that this period of weakness is behind us.

While our near-term forecast remains somewhat higher than that in the Greenbook, the revisions since September are similar. We have revised down growth in the current quarter by more than 1 percentage point, to 1¾ percent. We continue to believe that we are likely to see a modest expansion in the economy next year. However, recent developments dimmed prospects somewhat for the first half of next year. The recent weakening in capital goods orders is especially worrisome since capital goods investment is critical to a rebound in economic activity next year. Overall in our forecast, real GDP growth does not rise above its potential rate until the second half of next year, and the economy ends 2003 with considerable excess capacity. Under these circumstances, we expect inflation to trend down, with the core PCE index rising by 1½ percent in 2003 and 1¼ percent in 2004. I would add, somewhat similar to what Dave talked about in terms of the Greenbook, that analysis at our Bank—based on historical inflation forecast errors—finds that the risk of outright deflation in 2003 and 2004 appears to be quite small. It seems to me that the case for easing policy is strong. There is little inflation threat, recent data have been weak, and significant geopolitical risks appear to weigh on the economy. Thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. On balance, economic activity in the Seventh District appears to have softened further in September and October. Although our housing sector remains vibrant, consumer spending has weakened. With a few exceptions, such as the entertainment and recreational vehicle sectors, retail sales were reported to be weak.

Given the sharp declines in consumer confidence measures, many retailers worry that holiday sales will be disappointing. Such concerns appear to be making retailers more cautious than usual about ordering merchandise. In fact, a major appliance manufacturer told us that inventories at the wholesale and retail levels were lower than he had ever seen. Relating to what Bob Parry just talked about, the West Coast longshoreman issue, we're hearing from retailers that they are still waiting for substantial amounts of inventory to reach the store shelves. They know they'll get the merchandise eventually, but they're not sure they'll get it in time for the holiday and then, obviously, they'll have to sell it at a lower price. They'll sell it but at lower prices.

As for the automobile industry, light vehicle sales in October fell further below the lofty levels seen in July and August. Auto dealers and the press are reporting that consumers have become less responsive to incentives, suggesting that the consumer might be faltering. But this probably overstates the case. Average incentives were scaled back in October in part because incentives were higher on the 2002 models. Now in response to the weaker sales, automakers are boosting incentives on the 2003 models. GM in particular has already rolled out new programs and appears to be considering others as well. Thus, there could well be some rebound in sales in coming months.

With regard to capital spending, most businesses are still hesitant to commit to large projects. Several believe that credit rating agencies have become tougher, leading firms to conserve cash to avoid downgrades. In some cases, firms that had ordered capital goods are postponing delivery or just canceling their orders. Firms that are investing are doing so to improve productivity or replace depreciated equipment rather than to expand capacity. Sales of heavy trucks, of course, will be weak because of the disarray caused by the new engine

standards. One large nationwide trucking company is purchasing only a few of these new engines, just enough to test their reliability.

In manufacturing more generally, the list of contacts reporting weak or volatile demand is getting longer. For instance, the corrugated box industry, which had been showing signs of strength, now has flattened out, you could say. Or you could say that those manufacturers now view the box as half empty rather than half full. [Laughter] I'd better stop! A major high-tech manufacturer reported further slowing in demand from the wide array of firms that they supply. Labor markets remain slack. A large national retailer said that the number of applications for $8 an hour part-time holiday season jobs was up threefold from last year. All the jobs have now been filled in a much earlier time frame.

One of the two major national temporary help firms headquartered in our District, Manpower, noted a resumption of seasonal hiring that was absent in 2001. But the other one, Kelly, said that they were not seeing the typical seasonal surge in demand from retailers. Both thought the hiring environment remained sluggish, though not falling off as it would in a double-dip recession. Manpower's latest national survey shows that, after adjusting for normal seasonal movements, hiring plans for the first quarter of 2003 picked up slightly from this year's fourth quarter. So at least this is consistent with labor markets not deteriorating further. I should mention that this survey is confidential until November 18.

Turning to the national outlook, incoming news since our last meeting has mainly been disappointing. Job growth has been minimal; businesses remain hesitant to invest; and the trajectory of consumer spending has moderated, with the latest readings on consumer confidence disturbingly low. Of course, there have been some bright spots. Housing remains very strong, and equity markets have improved somewhat since our last meeting. More importantly, in terms

of the longer-term fundamentals, productivity looks very good. Given its strength over the past year, we can have more confidence that the underlying trends in productivity remain robust. And the banking system is in better shape than it was after the last recession.

So why can't the expansion gain more momentum? We do not see any glaring structural impediments that are causing sluggishness. Maybe it's the animal spirits. For all of the reasons we're painfully aware of, uncertainty appears to be the main factor holding back the economy, and the passage of time has done little to resolve it. This persistent overhang of uncertainty concerns me, as it could lead to a prolonged period of subpar growth and a large resource gap. I suspect this will be a major topic during our policy discussion.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. As far as we can see, the recovery is on hold in New England. Employment declined in August and September, and the region's unemployment rate has moved up. Both consumer and business confidence are off; reports from retailers are mixed; and office vacancies in the Boston area continue to rise, albeit at a slower pace than earlier in the year. About the only bright spot, like everywhere else, is continuing strength in residential real estate markets, which has led to home prices rising faster in New England than elsewhere in the nation. State and local governments face large gaps between incoming revenue and ongoing program expenditures, with Massachusetts alone facing a structural deficit of better than $1 billion on an annual basis after eating through its entire $2 billion rainy day fund. Looking forward, the New England Economic Project recently downgraded its forecast for the region. Regional job growth is now not expected until well into 2003, and unemployment next year is expected to be higher than this year. That about sums up the headline data for the region. We've also held a couple of advisory council meetings at the

Bank since the last Federal Open Market Committee meeting, and there has been more than the normal flow of downbeat anecdotal commentary. In sum, all of these inputs seem to reinforce the sense of downside risk both to investment spending and to consumption.

Just after our last meeting we held a gathering of software executives at the Bank and had a go-around as to their impressions about their markets. The companies represented telecommunications providers, biotech, data storage, network software providers, high-tech security, web-based career placement, and venture capital. Their perspectives ranged from being in the depths of "nuclear winter" in telecommunications to a sense of resigned soldiering on, albeit while laying off staff and reducing costs if at all possible. They all noted that their own spending criterion was, Will the business fall apart if we don't do it? And they believe their customers are employing the same rule. Even in the biotech arena, funds have dried up for research and development; only if a product is sellable can financing be found. Venture capital was said to be in a depression, not a recession, with many venture firms returning capital to investors. No one saw any recovery until late 2003 or 2004. This is what I mean about the downbeat nature of the anecdotes we've been hearing.

Recent contacts with the large industrial firms in the region reflect a similarly downbeat perspective. A large diversified manufacturer of a wide range of goods from appliances to aircraft engines reported increasing layoffs, little pricing power, and considerable excess capacity within its various industries both nationally and globally. A large manufacturer of consumer goods sees little improvement over the next twelve to eighteen months. A manufacturer of defense electronics and consumer goods plans a reduction in capital spending in 2003 and sees no circumstances under which its capital spending plans will be revised upward. A manufacturer of elevators, aircraft engines, and flight systems plans to reduce capital spending

by 10 percent in 2003. This company's customers are experiencing restricted access to credit and are more frequently asking for supplier financing. Finally, a large manufacturer of data storage systems is in the midst of a third wave of layoffs, with nine out of ten of his customers expecting IT budgets to be at best flat in 2003. None of these large manufacturing contacts saw much in the way of help from further monetary policy ease, seeing the current situation as one requiring a long workout period of restraint and caution.

On the consumer side, one large local bank reported that retailers appear to be maintaining very low inventories in response to expectations of weak sales. This bank also reported that its credit card outstandings took a sharp downward turn in mid-September and continued to be weak in October as well. Both the number of cardholders using credit cards for purchases and the average sales per cardholder declined from August to September. This is quite an unusual event for this company. October was trending lower as well, auguring poorly for the holiday season. This bank is the ninth largest credit card issuer in the country, with about 80 percent of its business national in scope rather than regionally based. Moreover, according to this bank, representatives of other large credit card issuers spoke of similar weakness at an industry meeting held at the end of October.

Finally, we also held a meeting of the Bank's Academic Advisory Council in late October. They were similarly downbeat about economic prospects. There were, of course, many debates among the group on the ins and outs of the current situation but surprising unanimity on one thing. Some wondered about the utility of further interest rate cuts, but no one debated that the risks in making such cuts, at least within reason, were small. In other words, further policy ease might not be a panacea, but it was not likely to hurt, and it might help a bit.

Looking at the Greenbook forecast and our own as well, I'm reminded of the phrase from *Alice in Wonderland*, "jam yesterday, jam tomorrow, but never jam today." Our forecasts this year have followed a regular pattern of pushing off into the future the needed upturn in business fixed investment, the jam in the forecast. Weak data on industrial production and durable goods orders and anecdotes reflecting business unwillingness to spend have pushed the expected upturn out to mid-2003. The proximate causes for this pickup would appear to be some lessening of uncertainty, the projected easing of excess capacity, particularly in the computer arena, and the continuation of an accommodative fiscal policy. All of these are open to debate, at least in my view.

First, it's not clear when uncertainty will ease or what role a conflict with Iraq might play. Excess capacity in computers may be declining—certainly the pace of real spending in the third quarter suggests this—but excesses in telecommunications remain high, and measures of current manufacturing strength and industrial production are not overly comforting. Fiscal policy, embodied in the partial-expensing provision for capital goods, may be accommodative, but my contacts have questioned whether any tax provision might make them willing to spend absent rising demand or some real indication of a new technological trend of some value.

Frankly, further easing in monetary policy might not trigger spending either, though it probably wouldn't hurt. Thus, I think it's possible that capital spending won't increase at the rate embodied in either the Greenbook forecast or our own. So to return to *Alice in Wonderland*, will the jam really be there? Moreover, now even the bread of the forecast—the base of consumer spending—is in question with the recent falloff in broad retail sales, spending on autos, and confidence indicators. It seems clear that consumer spending will weaken considerably in Q4, particularly relative to Q3, and then grow relatively modestly in the first half

of 2003—or at least that's our forecast and the Greenbook's as well. And at midyear, economic activity begins to turn up in the forecast in a substantial way, reflecting increasing corporate stability, rising job prospects if not job growth, and rising equity markets. Clearly these two forecasts, one for business investment and one for consumption, feed on one another. If one is gaining strength, the other comes along. But the reverse is true as well. Businesses won't invest if consumers won't buy, and consumers won't buy if they don't have jobs. The key question here is, What starts the process? Given the situation in the rest of world, help is not on its way from the external sector. That leaves only two major exogenous drivers of the forecast outside of an increase exogenously in animal spirits—accommodative fiscal and money policy. At their current levels, are these enough?

Fiscal policy in the form of further tax cuts is likely to be too little too late, at least for consumer spending. As I noted earlier, perhaps a change in tax provisions will be a shot in the arm to investment spending, maybe not. Then there is the issue of whether monetary policy really is accommodative. The Bluebook analysis suggests that it is increasingly less so. Credit spreads suggest that financing is harder to come by for more industries. And even the Greenbook forecast doesn't show much increased growth for interest-sensitive sectors, at least in the near term. Policy has to prime the pump of this dragging recovery, but I think it may not be poised to do so without some further change. This may be risky, as we've discussed in the past. But the greater risk may be leaving things the way they are. I don't know about the rest of you, but even if this forecast is right on the mark, another year of rising unemployment, most of the year to wait before GDP grows at potential, and inflation that falls to the low 1 percent range suggests to me that we're not doing enough.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. The information we have suggests that our District economy, like other regional economies around the country, softened in October from an already quite moderate pace over the summer months. Some of this weakness in our region reflected unusual special circumstances. We do a monthly survey of District conditions, and it indicated that retail sales and shopper traffic both dropped off very sharply in the month of October. That almost certainly reflected the sniper shootings that kept people in the Baltimore/Washington/Richmond corridor away from malls during much of that month. But there had already been signs of some slippage in retail sales earlier, in September. And the survey I mentioned suggests that activity is more sluggish now than it was several months ago in a number of service-sector industries, especially in the northern part of our region.

In manufacturing, according to our survey information, factory output held steady in October, but new orders declined in both September and October. In our region as in yours, Cathy, the anecdotal information for the most part is pretty bearish. There are some bright spots, though, in the information we've received most recently. One particularly interesting comment I heard was made to me by the chairman of the CSX Railroad, who simply because of the nature of his business has a broad range of contacts across a number of manufacturing and other industries. He told me that his sense from the conversations he has been having is that, barring further big negative shocks, the recovery is poised to accelerate by early next year. So at least somebody has some sense of positive animal spirits out there. As a number of people have mentioned for their Districts, housing activity still shows no signs of decelerating. So that's the news on the region.

On the national economy, for most of this year it seemed reasonable to think of the economy as moving forward with a relatively small and more or less stationary output gap.

Especially since the middle of the year, aggregate hours have been flat, and the growth of demand has been pretty much matched by the continuing strong growth of productivity. In this situation, at least until recently, I thought it was plausible to expect that with the real funds rate near zero, disposable personal income growing at a reasonably strong pace, and profits showing some signs of gradually increasing, an adjustment process was in place. And it seemed likely to me that, given time, this process would help overcome the reluctance of business firms to invest, eliminate the output gap, and put the economy back on a solid and reasonably balanced growth track. The information we've received in the last several weeks, of course, has called that view into question. After having been very mixed for most of the year, the latest data are speaking more uniformly, and they suggest that the output gap is, if anything, growing rather than shrinking. The growth of consumer spending has decelerated. The expected rebound of business investment now looks further off than we had hoped. All of this, of course, is reflected in your forecast, David, which suggests that the output gap is likely to grow through about the middle of next year before it finally begins to narrow. So the downside risk in the outlook clearly has increased, and I recognize that. That said, and I may be the lone voice in the wilderness, I think we need to be careful not to exaggerate the increase in the downside risk or to overreact to it. I think monetary policy, and here I would disagree with you a bit, Cathy, is still quite stimulative. Moreover, it is expected to remain stimulative for some time, and that expectation is holding longer-term interest rates down.

Productivity growth, as I think you mentioned, David, is likely to remain robust for the foreseeable future. That may restrain both job growth and wage increases temporarily, but it should help to increase corporate cash flow and equity valuations and provide at least internal financial resources, which at some point, hopefully not too far down the road, may help business

firms overcome their reluctance to invest. You also mentioned that the stock market was showing some signs of stabilizing; some of the imbalances that we've been grappling with appear to be diminishing. And while I know there are a lot of difficulties on the docks, as Bob Parry has described very well, that kind of longer-run uncertainty may have been resolved to some extent. Further—and I think especially importantly for monetary policy—while we may be experiencing some further disinflation, currently it does appear to be pretty mild.

So I think we should take the time to assess the persistence of the recent slowing in the recovery and its likely cumulative impact on the output gap before we react to it. I know, of course, that the markets and the broader public expect us to reduce the funds rate this morning. Consequently, if we didn't do that—if we disappointed those expectations—there would be some short-term cost. But I believe there is also a longer-term risk that adding additional monetary stimulus now to what we already have in place could create doubts that we will be prepared to reverse course promptly when the economy eventually begins to strengthen.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. Our recent Business Advisory Council meeting wasn't nearly as downbeat as Cathy Minehan's, and maybe it's because at least one member who didn't show up was from a company in bankruptcy! [Laughter] The general sentiment of the group was summed up by one of the participants who said that the economy has found the bottom and now it's only a question of how rapidly momentum builds. There was also a general consensus that equity markets have seen their lows and it's only a question of how slowly or how rapidly the markets strengthen. Several expressed the belief that depressed equity markets have been more of a factor in reducing job-hopping than has the softness in local labor markets. In fact, some reported recent firming in their local labor markets.

Regarding investment plans, two reported that they had taken off holds on investment spending since the previous advisory council meeting in the summer. Another said that his company believed that this was a good time for bottom fishing for equipment bargains and for depressed or bankrupt companies that are for sale. One specific report on investment spending, from an owner of what I think are now eight McDonalds restaurants in Kentucky, was that the corporation is shifting emphasis to upgrading existing stores rather than opening new stores. McDonalds announced that $3 billion will be spent in the next couple of years on new technology for its stores. One of the items mentioned was radio frequency remote order-taking devices. We found from directors that Bob Evans, Applebee's, Wendy's, and Kroger's, all District companies, also are spending more on technology to improve their operations.

As would be expected, suppliers to the residential construction sector are requiring mandatory weekend work through the end of the year. In commercial construction, one contact asserted that companies that are capable of build-to-design and turn-key projects are getting contracts while pure generic construction contracting is, in his words, "dead in the water." A maker of upper-end tools reported that both domestic and foreign orders in September and October were the best so far this year. From the bankers on our board of directors we heard that commercial loan demand and new applications have picked up recently. But members of our Business Advisory Council said that this may reflect only the fact that even medium and small companies are now spreading their business over three or four banks rather than relying on a single lender as they had in the past.

A manufacturer of packaged foods said that catalog and Internet sales have strengthened, with a noticeable pickup in items considered to be holiday season types of goods. Most important to this director, corporate orders for customer and employee appreciation gifts were

coming in strong; this reverses the dramatic drop they saw in sales of such items this time last year.

Regarding corporate earnings, one of our directors who sits on three industrial boards, Timken, Diebold, and Sherwin-Williams, reported that all three had strong third-quarter earnings and that their share prices also were recovering. This led our research assistants to turn to their Bloomberg terminals, and they found that thirty-nine S&P 500 companies are headquartered in the District; twenty-eight reported improved earnings for the quarter, and their share prices generally have risen from earlier lows. A director who has an investment management firm said that after a dismal September he thoroughly dreaded the coming of October. But in the end it was the best October in his memory. In what I take to be a pure signal of inflation, he also reported that companies are boosting retainers and meeting fees for directors by as much as 50 percent. No productivity there! [Laughter] I suggested that he take up the topic of Reserve Bank director fees with my successor. [Laughter]

Regarding national and global issues, I continue to believe that the near term is dominated more by fear and uncertainty than it is by any kind of risk and reward considerations. So I have nothing new to add.

I want to return to and extend some of the remarks I made at the last meeting about secular trends in manufacturing, especially nondurable goods manufacturing, that I believe will overshadow any cyclical trends one might be trying to find. Forty years ago, John Kenneth Galbraith said that the time would come when 2 percent of the population would produce all the things that we need. In that regard he may have been correct, but it depends on one's view of what we actually need versus what we want. He didn't say much about the things we might want. He made that statement about productivity trends not because he thought all the items

were going to come with labels that said "made in China" but just on the basis of extrapolating the trends in technology and productivity.

In September I traveled to a small town that I've visited previously, and there were three new stores, with names I didn't recognize, within walking distance of each other. I went into one of them and picked an item off the shelf, and there was no price label on it, so I asked the clerk how much it was. She said one dollar. So I picked up another item, a larger quantity of a similar product, and asked how much it was. And she said one dollar. I said I didn't get it. She said everything in the store is one dollar always. I said, "cool." [Laughter] This is price stability. But I asked how that could be. Why would anyone buy the smaller quantity instead of the larger quantity for the same price of one dollar? Expressing some frustration with my inability to grasp basic economics, she explained the quality difference between the two but repeated that every item in the store always costs the same amount. After making purchases there I went to the next store and asked, "Is everything in this store the same price?" And the clerk said that everything in the store costs the same, which is not exactly what I asked but it was close enough. The same was true in the third store; literally everything in the store was the same price.

The additional wrinkle to this story that made it really curious to me is that I was in Canada. Those were Canadian dollars people were spending. I went back and reported this to our economists, and one of them who also goes to Ontario frequently was curious about it, too. He found a store in northern Ohio called Dollar Tree that works the same way. He said that exactly the same items that were priced at one Canadian dollar were priced at one U.S. dollar, which tends to suggest that the actual costs to manufacture these products have fallen to a trivial level compared with all the other value added involved. That suggests, among other things, that

the labor component of what we call nondurable goods is going to continue to vanish to such a point that international competitiveness will no longer be a factor.

This gives rise to what I consider the Rubbermaid effect. That is, there comes a point where the labor component is so small that, as one manufacturer put it, labor could be free in China and China still could not compete. That's because the Chinese manufacturers can't get five blue buckets to a south side Omaha store tomorrow morning, but that store knows how many blue buckets it sold today and local manufacturers can get replacements there quickly. And this is happening not just in the nondurable goods area. A steel manufacturer whose firm is headquartered in our District said that over the past ten years the average increase in labor productivity, output per hour, at his firm was 9 percent per year. That means they can produce the same amount of steel with less than half the workforce they used ten years ago. A member of our Small Business Advisory Council who has a printing business said that he now produces the same volume—though I don't know how he measures his volume—with half the labor force he employed some years ago and he's still operating at only 60 percent of capacity. In his view, his competitors overinvested in technology. All this not only affects what we think about the labor market data, but over time as this trend continues we're also going to have to think differently about the price statistics, at least for certain types of goods. I say that because of what I saw as very clever tie-in sales in order to price all items at one dollar. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I'll report on developments in our District, but my comments will be less colorful! Conditions in the Third District have deteriorated somewhat since our last meeting on September 24. Indicators suggest that the pause we saw in the region's manufacturing sector this summer has worsened. The general activity

index in our business outlook survey moved from a slightly positive reading in September to a significantly negative reading of minus 13.1 in October. This was only the second negative recorded since that index began recovering at the beginning of the year.

The indexes of shipments and new orders also turned negative, although the deterioration was less severe and the results differed by sector. Durable goods producers generally reported falling demand for their products, while nondurable goods producers, including food product companies and apparel makers, reported some increases. Our respondents also told us that they have reduced somewhat their production plans for the fourth quarter since their customers have trimmed their own expectations.

Retailers have also expressed concern that the fourth quarter will be weak. Sales of general merchandise have been declining. The sales index of our Pennsylvania retail survey fell again in the third quarter for the second consecutive quarterly decline. This diffusion index indicates that almost 30 percent more of the surveyed firms reported lower sales compared with a year ago than reported increased sales. Area retailers tell us that sales remained sluggish in October as well. Some attributed weak apparel sales to unseasonably warm weather, but the softness was widespread across merchandise categories. Area auto dealers reported that sales declined in both September and October despite the continued financing incentives on some models. Retailers noted that they are trimming spending on acquisition of new space, renovation, and equipment. And commercial real estate activity in general remains anemic.

Labor market conditions in the District remain weak. While the tri-state unemployment rate is still below that of the nation, averaging 5.3 percent in the third quarter, employment in our region fell slightly. Our BLS respondents reported that they continued to cut manufacturing jobs in October. One hopeful sign comes from the recently completed Manpower employment

outlook survey, which indicates that employers in our three states do plan to add workers in the fourth quarter. Also, our contacts in employment agencies tell us that they expect healthier labor markets in our area after the turn of the year. It remains to be seen whether that will indeed be the case.

Residential construction continues to be the region's bright spot. Housing permits have been rising since spring. Real estate lending has continued to rise, and some banks indicate that the pace of refinancings has accelerated.

Turning to the national scene, I believe accumulated evidence suggests that the recovery has either stalled or slowed considerably since our last meeting. It just has not developed any traction. Moreover, activity in certain sectors, manufacturing in particular, has declined. Over the past six months, job growth has averaged only 36,000 per month, and the growth in the services sector, which is generally slower during the early stages of recovery, has been even weaker than average this time. Initial claims for unemployment insurance have remained at high levels. Investment is weak, and the orders and shipments data suggest weakness will continue in the fourth quarter. Inventories are low in many sectors, but firms are showing little inclination to start rebuilding them.

Enabled by accommodative monetary policy, consumers have buoyed the recovery. Low interest rates have sustained consumer spending on housing and durables. Refinancings have put money in consumers' pockets, and research by the Philadelphia staff suggests that this refinancing activity has had a significant impact on expenditures for consumer durables. In addition, the increase in house prices has raised the value of collateral used to support home equity lending, and that has enabled homeowners to bring forward some of their consumption. The consumer continues to be the essential part of the outlook. However, there is some danger

that, if refinancing or home-price appreciation slows, the strength of consumer spending will subside. Inflation remains subdued; even oil prices have declined in recent weeks. Moreover, core inflation is forecast to decline over the next year or so, making the recovery more vulnerable if there is a negative shock.

The Committee can do little to bring investment on line more quickly. Uncertainty over geopolitical issues will have to ebb and businesses will have to gain confidence in the recovery before they begin to make the commitments implicit in renewed investment and hiring. The question is whether the Committee can and should do anything to buoy the consumer in order to sustain the recovery until investment begins showing real gains.

One issue discussed at our last meeting was whether an easing of policy would exacerbate imbalances in the economy—in particular in the housing market—that would have to be worked out in the future. I myself shared that concern. But some recent work at our Bank suggests that relatively moderate growth in household investment during the preceding expansion leaves the potential for additional investment in that sector today, without fear of growing imbalances. As I've said at previous meetings, I have concerns about both trying to fine-tune the economy and the possibility of overshooting. I've argued for patience, saying that we should wait to see if the policy we had already applied was sufficient. But weak data have continued to come in, and positive signs in some sectors have begun to reverse themselves. I'm now losing patience. [Laughter] Perhaps it's time to consider another dose of policy medicine. Thank you.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Let me start with recent changes in District economic conditions, which generally have been modest—and not all of them have been negative. The housing sector

continues to be a very bright spot, and even homes priced at the upper end of the market seem to be continuing to move fairly rapidly. Labor markets are steady, I would say, but not strong. Manufacturing appears to be stable. We participated in a survey with the Minnesota Department of Trade and Economic Development, and I at least was somewhat surprised by the reports. I wouldn't say the tone was one of optimism, but most manufacturers seemed to feel that their businesses were stabilizing and that the outlook, at least for the second half of the year, wasn't too bad. Now, that survey was completed in September, and conditions may have deteriorated since then. But that was the message we got at the time.

I talked with a couple of senior executives from large firms in the paper industry who pretty much confirmed that sense of the business outlook. Certainly, they weren't in despair. I would characterize those conversations as reports that business was tough but not awful. It was possible to make money. They were profitable but, of course, not as profitable as the business executives would have liked. A similar conversation with a couple of senior executives in the publishing business had the same tone and tenor.

Consumer spending has been mediocre at best recently, although one remaining bright spot outside of housing is tourism activity, which has been pretty good during the fall, and reportedly early inquiries for next summer have been fairly strong. Finally, I would say that commercial construction has taken another turn down.

As far as the outlook for the national economy is concerned, I don't have a significant alternative to the Greenbook forecast to suggest, but I will distinguish between what I think I know and what I think I don't know. I'm very uncertain about whether growth in real GDP will pick up next quarter or sometime later next year; it may not happen until 2004 or perhaps beyond that. What I think I know, or at least what I'm less uncertain about, is that productivity is on a

strong and favorable trend, inflation is low and likely to stay low, and inflationary expectations are low and likely to stay low. Thank you.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. My Wal-Mart contact tells me that Wal-Mart's expectations for sales growth have been revised downward. He's now expecting sales to grow at the low end of the 2 to 4 percent range. Growth in same-store sales for stores open a year or more came in at 3 percent for September, which was particularly disappointing given that the comparison was with September a year ago. He said the weakness seems to have started in the second week of July and has been going on long enough that it looks as if sales growth has been downsized. I asked him particularly about total sales. He said that Wal-Mart's square footage is growing at a 9 percent annual rate—apparently they've been on that track for some time—but the deceleration in total sales matches the deceleration in same-store sales. They don't get a different picture on that basis.

He noted that the company is seeing a more pronounced mid-month paycheck cycle. Many people who shop at Wal-Mart are doing so after they receive their paychecks. When company analysts see a more pronounced cycle, they interpret that as meaning that people are more liquidity constrained and are delaying outlays until they get their paychecks. Moreover, this pattern is evident even in expenditures on food. He didn't know quite what to make of that because ordinarily food purchases are spread rather evenly over the month.

He also said that one cannot underestimate the impact of the dock strike, though in his view Wal-Mart was better prepared than most other firms. He indicated that the dock workers are working at about 60 percent of their usual speed, which I think would fit with what Bob Parry was saying earlier, and that the backlog will not be cleared until late November perhaps at

the earliest. Nothing that gets on ships in Asia now is likely to arrive in stores on schedule. In his view there's a lot of seasonal merchandise that will end up either being sold at distressed prices or being put in storage by some retailers to be sold next year. I don't know whether that's going to distort the inventory numbers. The categories affected include electronics, apparel, shoes, toys, Christmas decorations, and that sort of thing.

My contact at J.B. Hunt trucking said that the trucking business coming from the West Coast is more or less back to normal, though that's not really consistent with what Bob reported. To describe the overall economy my contact used terms like "wishy-washy," "has no vitality," and "is tentative." He reported that June was the strongest month this year and that business is slower now than in June, whereas usually his peak period is in the September-October time frame. So, he's had a less-than-normal seasonal change in the recent period. The retailers he talks to, including Target and Wal-Mart, are not all that optimistic. He used an expression I hadn't heard before, commenting "as they say in Arkansas, not much pumpkin," whatever that means. [Laughter]

My FedEx contact reported that his company has seen a significant softening in business since late September. On some days in October express volume was actually below prior year levels. The shippers FedEx people talk to expect a less busy holiday season than previously anticipated; they expect the holiday peak to be less extreme than usual. He also emphasized that the West Coast dock strike is having larger effects than expected. Of course, a fair amount of goods are being shipped by airfreight at substantially above normal costs—items like auto parts and so forth that can be shipped at these higher prices on a temporary basis. He mentioned especially that their international business is strong coming into the United States and that intra-Asia business is also strong, while U.S. exports are still on the weak side. He said there's a

distinct softening in the business. The slowdown is not a dramatic, "oh my God," type of event, but it is a noticeable softening. As with UPS they, too, are expecting a less robust peak in their business in late November and December.

My UPS contact said that his company has now reduced its 2003 calendar year forecast. Asian business is currently booming because of the dock strike, and UPS does not see an end to that until late this year; UPS is expecting fairly good growth in Asia, both within Asia and between Asia and Europe. Plans for further reductions in their workforce have not yet been announced—so, as with all these comments, you should not talk to outsiders about them—but he says they expect to furlough crew members or to introduce early retirement packages. That reflects a reevaluation of their prospects for next year; which involves having to cut their budget as compared with the 2002 budget by 2 percent. They do not plan to put special aircraft in place for the holiday season; they often hire planes and crews on a temporary basis. Their ground business was actually down 2½ percent in the third quarter this year in comparison with the previous year. He said it was the first year-to-year decline in his twenty-eight years in the business. UPS capital expenditures are at $1.9 billion this year and planned expenditures for next year are $2.0 billion. They are expecting to buy twelve new aircraft, down from the fourteen originally planned. They would have preferred to reduce the number to ten, but the nature of their contracts with the manufacturers makes it too expensive to cancel the contracts. I asked him what UPS thinking was regarding the effects on the company should there be a war with Iraq. He said that they have standing arrangements with the military for the military to take UPS planes for airlift needs, and the same is true with FedEx. He noted that there are three stages to this process. They are currently in stage one where UPS is providing one wide-body to the military on an ad hoc basis, typically on weekends when the plane is not used anyway. So at

this point there's not too much effect. He indicated that even if they went to stage three, where the maximum number of planes would be taken by the military, UPS would be able to keep its domestic network going. The planes would come out of the international network. However, he said restrictions on flying probably would be so severe should they get to that stage that the domestic network would be mostly down.

When I read Part 2 of the Greenbook, I was struck by the fact that indicator after indicator and data for sector after sector—with the exception of housing—seem to be coming in at a disappointing level or somewhat below expectations. It made me think about the old-fashioned wind-up alarm clock. You wind it up, and when the alarm first goes off, the bell rings vigorously, and after a while the sound just tails off. In terms of economic activity, the bell is still ringing, but it's not very loud or vigorous anymore.

In thinking about the current situation, I asked myself this question: Is monetary policy really expansionary? There was a long discussion of this type of issue thirty years ago in the whole debate of aggregates versus interest rates. I think we all decided at that time that interest rates, of course, reflect the combination of supply and demand. And if demand is weak enough, an interest rate target could be holding up interest rates rather than pushing rates down. In my view, one indicator worth looking at in this regard is the pattern of money growth. I understand all the caveats that are necessary. When I look at money growth trends, there has been a clear tapering off in the last few months. Money growth over the last six months, as measured by both M2 and MZM, has been in the neighborhood of 9 to 10 percent. I would feel much more confident that policy is truly expansionary if those numbers were more in the 12 to 15 percent range. But they certainly have been tapering off in recent weeks. That's all. Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I want to update a little story that I told you a meeting or two ago; I've been wondering since Jerry Jordan spoke if this had any relevance to his comments. I had mentioned that several maquiladoras along the Tex-Mex border on the Mexican side had left to go to China to take advantage of lower wages there than in Mexico. Our staff has identified at least eight that made that move who have since returned because they didn't find the quality of labor in China up to standards. In one of those instances, the Chinese government kept the equipment and machinery, took it apart to see how it worked, and couldn't get it back together. [Laughter] That might curb the outflow in the future.

In the Eleventh District economy there's not much pumpkin. [Laughter] At our meeting in late September I reported that growth in the Eleventh District had stalled over the previous two months. As indicated in the latest Beige Book and by recent economic data, the Texas economy has shown signs of contracting over the last six weeks. Our regional economy had exhibited tentative signs of improvement earlier in the year, but the information from the second and third quarters suggests that we're still in recession. Employment has declined for five consecutive months, and the unemployment rate has been stuck at 6.1 percent for the last three months. The economic mood expressed at our board of directors meetings over the last two months has been somber at best. Beige Book contacts indicate that all sectors of our economy are moving backward with the exception of agriculture. More disturbing is the fact that our contacts were virtually uniform in their description of current conditions and the outlook for the remainder of the year. Usually we get a mixed picture, with some companies and industries moving forward while others are regressing, but not this time.

The Eleventh District has been weaker than the nation partly because of our concentration in high-tech manufacturing industries and in energy, both of which have continued

to contract in recent months. Construction is more of a mixed picture. And like the rest of the country, residential activity is holding up pretty well but commercial vacancy rates are rising sharply.

Turning to the nation, since our September meeting the national economy has also weakened somewhat. Again, using the Beige Book as the source, three Districts reported firmer economic conditions. Most of the remaining Districts characterized economic activity as remaining soft or as having deteriorated. My own view of the national economy is captured in New York's summary: "The economy shows further signs of slowing while prices of goods and services were reported to be flat to down slightly." The statistics reinforce this picture of an economy on the ropes. Declines in retail sales and in capital goods orders and shipments stand out. But declines in industrial production and in the leading economic indicators, along with a deep plunge in consumer confidence, are also worrisome. Last week's job report—the establishment survey is the one that we should be looking at—suggests that we've had negative job growth so far during this past year of what presumably is a recovery.

My economists tell me that in forecasting inflation a naive forecast does about as well on average as more-sophisticated techniques. That being the case, I'll assume that inflation over the next six months will be close to what it has been over the last six months. And there seem to be no recent developments in the economy that would suggest that inflation is likely to accelerate. If anything, a slowing economy together with the way that productivity has been holding up suggests slightly lower inflationary pressures in the months ahead.

At our last meeting I suggested that we needed to ease by 50 basis points. The evidence that has become available since then reinforces that feeling. Some people, including some at our

Bank, are more concerned than I am that a negative demand shock could cause the disinflation trends we've had lately to morph into deflation.

The FOMC has avoided inflation targets being thrust upon it by political mandate. In essence the Congress has given us the discretion to set our own inflation targets largely because they've trusted us to do the right thing. If we were to allow a situation to develop in which the U.S. economy experienced deflation, the Congress would be likely to impose inflation targets on us and they likely would be somewhat different from those we might impose on ourselves. We can debate what we believe to be the current rate of inflation, but I think we would all agree that we're at or near the lower end of the range that we would set if we did have inflation targets. Our job right now seems to be to make sure that we don't go below that floor.

In summary, I think we should ease significantly, primarily to stimulate economic growth and employment growth. The low and falling inflation rate, with some possibility of deflation, makes the risk of that easing very small.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, the Tenth District economy has shown signs of slowing since the last meeting. But most of our business contacts still remain relatively optimistic about the future. Job growth has been slow, and layoff announcements have picked up, after subsiding through late summer. Reflecting the weak labor market and the general climate of uncertainty, consumers are spending less freely than they were earlier. Also new commercial construction has halted, as has the recovery in manufacturing in our region. On a brighter note, housing activity continues to hold up despite increasing concerns that the boost to demand from low mortgage rates is nearing its end. There's no real sign of that yet.

Let me speak just a little more about manufacturing. It has been flat, as I said, for four consecutive months following a strong rebound earlier in the year. In the Bank's October manufacturing survey, production and new orders moved slightly above year-ago levels but that, of course, reflected the depressed levels last year stemming from the effects of September 11. Still, firms are moderately optimistic about activity six months from now, and they continue to project improvements.

The District's labor market does remain slack, and job growth slowed in most states during the third quarter. And layoff announcements increased somewhat noticeably in October after declining a bit in both August and September.

Let me talk a minute about consumer spending, which has eased somewhat. Retail sales have edged down from earlier in the summer, as uncertainty and slowing job growth have taken their toll. Auto sales also have slowed since August, as some of the manufacturers have backed away from zero percent financing only to reinstate it subsequently. I think the way one of our major auto dealers described the interest rate environment for the auto industry is very interesting. He viewed the environment before September 11, as we eased rates, as comparable to how he might imagine smoking marijuana, whereas now it seems as if those in the industry are mainlining the drug. His point is that they can't get away from the zero rate financing and are even expanding on it. I think that's important to take note of.

Looking at wage and price pressures, they remain largely subdued in the region. In an informal survey we conducted just a week ago, firms said that wages likely will increase about the same in 2003 as in 2002. And as others have noted, health insurance costs will go up much more; it is one of the areas that employers are concerned about.

Briefly, the farm economy continues to be rather mixed. The weather conditions have changed again, with rain delaying some harvesting. But I want to mention that the drought conditions and the plunge in livestock cash receipts are expected to drive farm incomes down significantly in our region as we look to 2003.

Turning to the national economy, obviously recent data show the news to be mixed, as others have pointed out. Growth in this quarter is likely to be low, though I would suspect not quite as low as in the Greenbook forecast. But I wouldn't quibble over the difference. Looking to the future, like the Greenbook I expect growth to pick up, returning to trend levels in the second half of next year and to above-trend levels in 2004. I think it's important to recognize that this outlook obviously reflects the stimulative effects of fiscal and monetary policy currently in place. But I realize that we are facing some important and strong countervailing forces. Vacancy rates, capital overhang, and excess capacity in the high-tech industry have damped investment spending as we've noted. This is a situation that monetary policy probably will not be able to quickly or easily offset. Perhaps more important are the forces of uncertainty. There is the risk of a war with Iraq; its timing, duration, and so forth are an uncertainty. Terrorism is an uncertainty. And the uncertainty of just how the economy is performing in this kind of environment has its own effect. This leads me to understand why there is discussion of further interest rate cuts. But, not unlike Al Broaddus, I would sound a cautionary note. I think further cuts will in fact stimulate consumer and business spending, as Dave Stockton said, but perhaps more marginally than the normal statistical models would suggest because of the issue of uncertainty.

It's important also to realize that the positive effects on consumer spending will come primarily as a result of consumers taking on added debt. Maybe it won't be substantial in terms

of the imbalances that we talked about. But I believe it is important in the sense of increasing their fragility for the future. So I think part of our discussion on policy should address the issues of long-term against short-term tradeoffs, given the high degree of uncertainty and related to that the uncertainty of how our policy might affect outcomes going forward. Thank you.

CHAIRMAN GREENSPAN. Shall we break for coffee?

[Coffee break]

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Economic activity in our Southeast region slowed further in early fall. Despite the cutesy signs we've all seen in some merchants' windows such as "we hear we're in a period of slow growth but we've decided not to participate"—or some version of that—our area is not showing its typical, faster bounceback from recession than other areas of the country. That's largely explained by the absence of the usual sharp housing rebound that has often jump-started our extensive housing-related industries and the continued sluggishness in business services, a sector on which we've developed a substantial dependence. Tourism and business travel are still disappointing. Following a slow summer, out-of-state tourists have yet to return to our important Florida destinations. Yesterday morning the corporate head of our Atlanta tourist and convention bureau told me that their hotel and convention services firms have now pretty much written off any meaningful rebound in business in 2003 based on very disappointing advanced bookings for next year. Of course, that pushes off still further the rebound in business airline travel that our friends at Delta Airlines, other carriers, builders of airplanes, and others in that food chain have been waiting for.

Our retail sector is soft overall, and expectations for the upcoming holiday season are modest, in part because of the short period between Thanksgiving and Christmas. But our

retailers are not expecting a total disaster either. Because of their lower sales expectations, they tell us they're being conservative in their approach to both inventories and staffing. Auto sales in September fell below year-ago levels. Regional manufacturing remains sluggish except for defense and auto-related companies. Year-to-date through September our defense contractors have garnered $7.4 billion in new contracts, and that has been a nice shot in the arm for many companies. Consistent with recent aggregate evidence on improved productivity, we continue to get reports suggesting that manufacturers are developing still more lean manufacturing processes. And managers at our state-of-the-art auto-producing facilities continue to boast of significant technological advances in their production lines, with more to come.

Continued resilience in our housing sector remains one of the mainstays of District activity, but we did not get a sharp dip in housing during the recession and, therefore, did not get a sharp rebound. Activity remains at very high levels. The south Florida housing market would have to be characterized as red hot. One director reported that when a new moderately priced development on the west coast of Florida opened, demand was so great that sales had to be limited to three homes per customer. That's a semi-true story. [Laughter] Outside of Florida, the housing market is essentially flat in terms of growth but continues to operate at very high levels. The exception is the high-end markets in Atlanta, Nashville, and Tampa, which have clearly softened. Commercial real estate remains quite weak across our District. As one office leasing agent told me yesterday, it's not so much because of the overbuilding of new space that he has seen in other cycles but the collapse of demand. His company has reduced staff, tightened their belts, and given space back. He suggested the work-off of current excess office space is going to take quite a long time.

A final comment on the region: The District's credit markets are characterized by solid consumer demand and virtually nonexistent corporate demand for funds. In fact, our banks tell us they will have to work hard to maintain any growth at all in business lending, as payoffs threaten to exceed renewals and new lending. We see few signs of credit supply problems. Deposits and wholesale funding to banks are readily available, and banks stand ready to lend to creditworthy companies. Credit quality still appears to be good, and banks tell us that they think they're past the low point in the current credit quality cycle.

On the national front, the hope that data releases between FOMC meetings might provide some very clear hint about the future direction of the economy seems to have been, as Roger Ferguson reminded us at the last meeting, wishful thinking. The measured rebound in output growth in the third quarter and the slow second quarter were generally in line with expectations, and subsequent data seem to be generally consistent with a slow fourth quarter as most have been forecasting. I do not think we should be surprised or should despair at the lack of an employment rebound at this point in the cycle. As the Greenbook suggested, it is quite likely that we will have some more months of modest employment gains, with limited growth in final demand, continuation of good productivity gains, and the general sense of caution that hangs over corporate America because of geopolitical issues. We should take some comfort in the fact that labor markets seem to have stabilized at least to some extent in recent months.

I would argue that the continued delay in the rebound in investment spending, while disappointing, is understandable, given the substantial excess capacity that has built up in many industries and the time it always takes for new investment such as we had in the late 1990s to become fully operational in the payback mode. And there's a general sense of caution and uncertainty as well as the geopolitical issues that hang over decisionmakers. Consumer income

continues to grow, and consumers have begun to restructure their balance sheets to slow down debt accumulation and to shift debt composition toward mortgages. Consumers have also moderated their spending even in the context of very low interest rates and extraordinary incentives on auto financing. Going forward, consumer spending appears likely to be more subdued. But that, at least in my mind, is understandable and rational.

In short, I believe that we are positioned to experience the modest but fundamentally sound growth traced out in the Greenbook. I for one would be reasonably happy with such an outcome. Ironically, by almost any yardstick except that of the late 1990s we'd be pleased with such a path. As we move to the policy discussion, I think it will be tempting to want to do something even when the balance between potential short-term gains and the potential longer-term negatives of a still more accommodative policy are not completely clear, at least not to me. I have been among those who have urged that patience be part of our prescription and that we weigh carefully the pressure to pump up short-term spending and growth in sectors that may already be at or beyond sustainable levels. The expected slower growth in the fourth quarter, which is a short two months from being history, and the forecast for next year and beyond don't look all that bad to me. As perhaps another voice in the wilderness, I think a case can still be made for some patience. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. In our discussions and announcements we have been counting on policy accommodation and elevated productivity growth to boost the rate of economic expansion and over time to begin to close the output gap. The logic is impeccable, but it's not happening. Recent data confirm the sour anecdotes about flagging demand, production, and employment that we've heard from the summer on and that have been so evident in reports

from Reserve Banks and other sources. Smoothing through the monthly data with their distortions from changing auto incentives and shifting seasonals, and taking the staff forecast for the fourth quarter at its face value, it's evident that economic expansion has slowed from the first to the second half of the year. Importantly, this has reflected a downshift in the growth of private domestic final demand rather than the speed-up we expected. The weakness in investment persists, and now consumption growth is tapering off. Moreover, the weakness is global. Growth is slowing in many places and, as Karen remarked, it reflects shortfalls in domestic demand abroad, not just a reaction to slower U.S. growth.

It's not entirely clear why the strong fundamentals are not showing through. It does seem likely that the geopolitical risks we have cited—concern about terrorism, war, and oil prices—have made people more cautious, especially businesses in their investment decisions. More basically, the backwash of the previous capital spending boom has proven stronger and more persistent than anticipated. This is evident not only in lingering capital overhangs in a few sectors but also in continuing suspicions that corporations still have more residual bad news to reveal and considerable uncertainty about how an unusual business cycle led by capital spending will work itself out.

Among other atypical developments, business failures, defaults, and downgrades have continued to mount even after three quarters with average growth of 3 percent. And despite the efforts of businesses to trim costs, which have been reflected in astonishing productivity numbers, the rebound in profits has been limited, in effect stalling out in recent quarters. Disappointment with growth and profits and the perception of heightened risk and uncertainty have had a marked effect on financial markets. And reactions in those markets are reinforcing

the caution in business and household spending, in part by offsetting the effects of policy easing on financial conditions.

Like President Poole, I was thinking about the degree of monetary accommodation we have. Although the Committee has reduced the federal funds rate by 175 basis points since September 11, 2001, and the ten-year Treasury rate has come down 80 basis points, the BBB corporate rate—a good proxy for the long-term borrowing costs facing the median corporation—has actually risen 20 basis points over this period. Stock prices are off 15 percent, and the broad exchange rate index is about unchanged. In addition, with the credit status of businesses changing rapidly, markets are quick to price in possible problems. In other words, in several key dimensions, financial conditions are tighter and markets less receptive than they were before the current degree of policy accommodation was put in place. Against this economic and financial background perhaps we shouldn't be surprised that policy accommodation is being felt primarily in the housing market, where rates have followed Treasury yields, and that businesses are conserving resources by holding back on capital spending and hiring.

Looking forward, I think the contours of the staff forecast—a gradual lifting of gloom and restraint and a strengthening of demand—are as good a guess as any, given the uncertainties that Dave emphasized. A high proportion of the credit and transparency problems accumulated during the boom period should already have emerged, suggesting that defaults and downgrades should level off and begin to decline along with earnings restatements, thus helping to reduce risk premiums in markets. And this should contribute to a pickup in equity prices, further lowering the negative tug from the wealth effect. The jump in equity prices, the rise in long-term yields, and the decline in some risk premiums over the intermeeting period suggest that financial markets already see light at the end of the tunnel. But on many occasions in recent memory such

a light turned out to be an oncoming train. Continued strength in housing attests to households' underlying willingness to spend. At some point, some of the geopolitical uncertainty should begin to dissipate, and we do need to recall the natural resiliency of the economy—its tendency to return to high levels of production when there are no impediments. This resiliency produced surprisingly strong results only a few quarters ago.

But the pickup envisioned is gradual and projected. The data are going the other way. As a consequence, the economy looks as if it will be on a lower track, operating with a higher and possibly rising level of slack and greater disinflationary—or even possibly deflationary—pressures than we expected, while inflation is already as low as I would like to see it go. And the automatic stabilizing properties of the financial markets have been short-circuited by heightened perceptions of and aversion to risk. So if I can edge just a bit into the second half of the meeting—after all I've been good for two meetings and that's about as much as one can expect—I do think it's time for a little extra push from this Committee to enhance the odds of a vigorous rebound from the weaker level of activity now in process. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. The Chair grants you an indulgence! [Laughter] Vice Chair.

VICE CHAIRMAN MCDONOUGH. The Second District economy has shown some signs of weakening since the last report, but labor market conditions and prices have remained fairly stable. Retailers report that sales weakened in October despite a slight weather-related pickup in the second half of the month. Inventories are down from a year ago, but they're described as a bit high, and retailers say they are discounting more heavily. Consumer confidence in the region fell sharply in October, reaching a new cyclical low. Unemployment rates in the District were steady to low in September, and payroll employment was about

unchanged. Home construction was fairly strong in September, but sales of existing homes weakened, particularly in the New York City area. Office vacancy rates across most of New York City continued to climb, but we've had some luck in filling office space in lower Manhattan. Surveys of District manufacturers and purchasing managers indicate some improvement in recent weeks. And bankers in the District report steady to rising loan demand, further tightening in business lending standards, and very stable delinquency rates.

The fiscal plight in New York City is very difficult to exaggerate. The size of the deficit is approximately equal to that in the mid-1970s at about $5 billion to $6 billion. It looks as if a combination of increased taxes and reduced expenditures may solve about $2 billion of the shortfall. Some smoke and mirrors will take care of about another billion dollars, but that leaves $2 billion to $3 billion that will have to be borrowed in a very inhospitable market. The State is in no position to help the City in any substantial way, and I think we are going to hear about the magic of revenue sharing being expressed very loudly by the congressional delegation from New York in coming months.

CHAIRMAN GREENSPAN. They don't want to share revenues! [Laughter]

VICE CHAIRMAN MCDONOUGH. No, the revenues come from here to there.

CHAIRMAN GREENSPAN. That's a little clearer.

VICE CHAIRMAN MCDONOUGH. It's called revenue sharing. It's a euphemism. At the national level, we at the New York Reserve Bank think that the economic outlook remains uncertain, to put it mildly, with very considerable near-term downside risk. Our forecast has growth of less than 2 percent in the fourth quarter, and we believe that a reasonable forecast for next year calls for fairly decent growth like that of the Greenbook. But we as a Bank believe and I personally believe very strongly that the time to take out some insurance against the downside

risk has arrived. In my view, one can reach that opinion easily just by looking at the domestic economy alone, but I think the international situation makes the need for insurance even clearer.

Europe is stagnating. There was an agreement announced this morning between France and Germany that they would combine positions going into each meeting of the Economic and Financial Council of the European Community, which means that a large center right majority in France is going to be guided by a very small center left majority in Germany. How that would make sense to French voters baffles me somewhat, but that's what they decided. I mentioned at the last meeting that Japan is Japan. Well, it's still Japan but even more so after the recent adventures with bank restructuring or not bank restructuring. And Latin America, despite some respite for Brazil, is if anything weaker. It's my belief that the time for the Committee to act has arrived. And in my view the action that we take today should be decisive. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. I agree with many of the comments and remarks that have already been made. The expansion appears to be losing momentum and slowing, but it is still moving ahead. During the last couple of months, manufacturing activity, new orders, auto sales, and general retail sales have slowed from their prior pace. And capital spending still shows no upward momentum, as companies continue to cut costs to achieve earnings growth, especially in an atmosphere of increased uncertainty about geopolitical and economic risks.

On the plus side, housing continues at strong levels. As Governor Kohn just mentioned, while the cost of capital to companies has been rising, it continues to set record lows for the household sector. And I think that's the reason we're seeing growth there. Business inventories finally show signs of growth after six quarters of liquidation, and that's a plus. Business fixed

investment, as we've discussed already, is showing mixed signals depending on which set of numbers one looks at. I would say, based on talking to corporate executives, that the disconnect is partly because executives think of expenses running through the P&L statement. With the huge wave of capital spending in 1998 and 1999, which now is fully amortized off the books, firms actually can increase outlays and still have declining expenses.

Overall the tone of recent economic activity has been very disappointing. There is little indication of strength in major economies elsewhere in the world, and it's not evident that our economy can get much of a boost from any outside source. Now, I know that monetary policy operates with long lags, but it has been eleven months since our last change in the fed funds target rate. When I look at the staff forecast this time, I notice that in this quarter and the first half of 2003 the output gap has been widened by ¾ point. That tells me not only that we have to wait longer for a rebound but that the gap between actual and potential economic growth is bigger. At the last meeting I thought it was a very close call as to whether we had reached the point where we needed to ease further. The data that we've received since that meeting tell me that the time is now right and we must move at this meeting.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. A number of people have already discussed the weakness of the incoming data, the step-down in growth from H1 to H2 and the fact that forecasters have marked down the near-term and intermediate-term outlooks. So I'll not attempt to elaborate on those points. Rather, I'd like to focus my few minutes on two assumptions that I think are important in the baseline Greenbook scenario and that give me some concern.

First, the baseline assumes that over the forecast period investment will pick up. Of course we recognize, as Dave Stockton said in response to Cathy Minehan's question, that a number of businesses clearly are investing in some elements of business fixed investment; real investment in equipment and software is indeed positive. However, there are several reasons for my questioning whether the level of investment will increase in the intermediate term. One is that we really don't know the degree of capital goods overhang and cannot take for granted the statement that the Greenbook authors make early on that the capital stock is really closer to firms' desired levels. As the staff well recalls, a few years ago we attempted to find answers to this question and, while I believe the work was well done, the conclusion I would say was not definitive.

Another reason for doubting an intermediate turnaround in investment, at least with respect to the manufacturing sector, is obviously that capacity utilization is relatively low, and the relationships between investment and capacity are quite clear.

The third reason for having some doubts about the forecast of a bounceback in investment as built into the Greenbook baseline is that we know that business fixed investment, particularly in equipment and software, is driven by two separate forces—one a substitution effect and one an income effect. The substitution effect, based on the fact that the price of capital has come down relative to labor, would lead businesses naturally to want to substitute capital for labor. From that explanation, one would expect to find a negative correlation between employment growth and investment growth. There's also an income effect, which I think we've been talking about implicitly here; uncertainty with respect to the outlook may indeed hold back businesses in terms of making new investments.

I asked the staff to perform a simple test of these correlations to see if the negative or the positive—that is to say the substitution effect or the income effect—was stronger. It turned out that for long periods of time, including the post-1995 period, the positive correlation between increases in employment and increases in investment was very strong, and indeed statistically significant. The reason I raise this technical point relates to the implicit assumption in many comments that it is in fact the outlook with respect to profitability, growth, et cetera, that is important in business people's thinking. Indeed, that turns out statistically to be the case. And since the outlook here is really quite murky, it is not surprising that it has taken some time for investment to pick up.

The fourth reason I have some concern about investment as built into the baseline forecast has already been noted, and that is that for many corporations the cost of capital has not become lower during the intermeeting period. Indeed, it has become higher. In addition to that, we see from the survey of senior loan officers that demand for loans, from banks at least, has been tepid. And that has been attributed in large part to reduced capital expenditures and lower planned expenditures. So we should have at least some concern about the baseline on the investment side.

I'm equally as skeptical with respect to the consumption side for a number of reasons. One is that the income tax reductions from the 2001 tax legislation have for the most part already played out. They are forecast to add I think only 0.1 percent to GDP growth for 2003 and 2004. Second, mortgage refinancings, while still high, do show a tendency to be inversely related to changes in mortgage rates and not just to the level of rates. So if mortgage rates do not continue to come down, then there might not be the support for a continuing wave of refinancings at the recent high level. And finally, as others have indicated, while there may be reasons to interpret

the most recent round of auto incentives differently, the response to those incentives has not been as encouraging as earlier rounds. One might add to that waning consumer confidence.

So I put all this together to say that in my personal forecast, though I'm not a professional forecaster, I would put more weight on the alternative scenario involving weaker aggregate demand as opposed to the baseline. And that scenario takes the baseline and makes it, to my mind, look much worse. Now, unlike Governor Kohn, I seek no indulgences. I will not go into the discussion reserved for the second half of our meeting. I will only encourage the Committee to look to another alternative in the Greenbook, which is the lower funds rate forecast. [Laughter] I think that's consistent with the rules.

CHAIRMAN GREENSPAN. So to speak! Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. I won't belabor the evidence of present day weakness, but let me look ahead and ask what I think is an important question. It is, What is going to drive the economy? In the late 1990s it was investment; more recently it has been consumption and housing. What's next? I can't find much. Consumption has held up well until now, but evidence of collapse lies all around us. Auto sales were high through August but dropped sharply in September and October. Non-auto consumption spending was strong through July but has barely grown since then. Consumer confidence has dropped sharply as has the wealth-income ratio, kicking into consumption functions right about now. Personal saving rates are beginning their long anticipated rise. Housing, too, has held up well until now, but the staff has forecast it to drop off next year largely because of stock adjustment considerations.

Fiscal policy could provide an expansionary boost, and indeed one does hear that fiscal policy is accommodative. But what one really should hear is that fiscal policy used to be accommodative; it's not particularly so now. The staff computes a measure of the fiscal impetus

of the federal budget, cyclically adjusted, with each budget component weighted by its likely impact on spending. This measure rose to a peak with the spending increases and tax cuts in the first half of the year but now has dropped back about three-quarters of the way toward neutrality, where it stays roughly through the end of the forecast period. Fiscal policy is not restrictive, but it's not nearly as expansionary as it was; and everybody knows that at the state and local level budget policies will have to be quite restrictive this year.

Conceivably exports could provide a boost to the expansion, but this doesn't appear very likely either. The staff is now projecting that foreign output growth will be less over the forecast period. They have an export income elasticity of 1, so exports should be at best a neutral factor.

Perhaps the impetus to demand can come from business fixed investment; it may eventually, but it's not likely to happen soon. Real business fixed investment has or is slated to drop in every quarter of 2002 before beginning to grow again next year. In terms of the forecast for next year, it is sobering to go back and check the Greenbook forecasts on business fixed investment; they've been steadily lowered by fairly large amounts since last March.

None of this changes the fundamental economics of the picture. When the capital overhang developed, capital investment spending was expected to be weak for a while, and the length and depth of the slowdown would depend on how well other types of spending filled the gap. Housing has filled the gap admirably up to now. Consumption filled it until late summer. Fiscal policy helped for a while. But until investment comes back, there seems to be nothing to drive the economy at this point. Hence, it seems quite reasonable to forecast, as the staff does, a continuation of output gaps, slowly rising unemployment, and slowly falling inflation. Whether the continued high levels of unemployment or the possible early onset of deflation are more worrisome, I leave to the listener to decide.

Much of that commentary would have been considered radical a short time ago but it is now fairly standard. The new question is whether at these low interest rates further monetary expansion will help lift the economy out of the doldrums. There are inversions between short and long rates, and maybe we have a situation where short rates can be cut without much impact on long rates or on the economy. I think not, for several reasons.

Inversions can come about from various types of market imperfections or changes in expectations. But the usual reason is inflation. In this scenario, commonly attributed to Milton Friedman but perhaps more appropriately to Henry Thornton—I got that from Bill Poole—[laughter] lower short rates imply an increase in money growth and higher permanent inflation. The key link is to higher permanent rates of inflation. But it is simply hard for me to see how a modest monetary expansion at this point could generate much inflation. Moreover, even if cuts in short rates just lower long rates a bit—as they may, given the present low levels of long rates—that bit may be quite important. Long-lived assets such as common stock or investment goods are valued by dividing the stream of earnings by the long rate. And at low levels small changes can have big effects on valuations. Because of this year's stock market declines, forward earnings-price ratios are now back to levels well above the long-term real interest rate, and some rise in stock values, perhaps as a result of monetary expansion, should not be unexpected. But we could also see reduced default rates, drops in credit spreads affecting lowly rated borrowers, and further declines in mortgage rates. Even the mighty dollar could finally fall if our short and long rates drop. Reflecting a point that Don Kohn first made and that Roger Ferguson talked about a minute ago, economists at Goldman Sachs point out that, because of the dollar and the stock market, their index of overall financial conditions indicates that monetary conditions actually are tighter now than when we first started easing back in early 2001. One

may not buy this claim entirely, but it still seems likely that at the margin further rate cuts should be expansionary.

Obviously, we're making policy under uncertainty here. The economy is buffeted by new and not well understood factors, and interest rates are well out of their historical ranges. We cannot be certain that the economy is too weak, though I feel pretty strongly that it is. We cannot be certain that further money ease would help, though I feel pretty strongly that it would. Thank you.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Let me make two general points. First, in conversations with bankers I surveyed over the past week, almost everything I picked up anecdotally supports the update that Dave Stockton gave us. Second, I would say that the flavor of those anecdotes was along the lines that Cathy Minehan, among others, described very well. But I'd like to go over just a couple points that I did pick up.

One of the bankers that I talked to has an automobile finance subsidiary in nine states on the East Coast; and in all nine states, sales of new vehicles are down across the board. He attributes that to the fact that the spate of aggressive financing deals has in fact exhausted the appetite for new car purchases. So in the view of my banker contacts, the strength that we've been able to get from the automobile side probably has been dissipated. Moreover, and this is a secondary consideration from their standpoint, they don't believe that the automobile manufacturers can sustain the strategic direction they have taken, with essentially profitless sales of automobiles. Because of the deterioration in their financial positions, they've increased the risk premiums. They're going to have to find a new paradigm there, so that approach is probably over.

On residential real estate, however, I got the same sense that Susan Bies and others have talked about. There is still strength in that sector, with no deterioration evident. From the banking side what we're getting is no improvement in commercial lending activity and no significant deterioration in asset quality. But in addition to their assessment of developments in the auto and residential real estate sectors, all three of the bankers that I talked to had the same sense that activity in the retail sector has declined.

Moving to the fiscal policy issue, yesterday's election has enormous implications. Most of the focus up to this point has been on the construct of the new Congress starting in January. But some significant issues will be addressed in the interim during the lame duck session. Some of the variables are so recent and so unexpected that they haven't really been considered fully. But let me go over a couple of them.

First of all, the government is being funded now on a continuing resolution that goes only through November 22. So either the Congress has to address that by a continuing resolution that would go beyond the time the next Congress convenes, probably until about March, or the matter will have to be taken up this year.

Second, the most critical election that took place yesterday in terms of the near term was in Missouri. With Senator Talent being elected to fill an unexpired term, he will be eligible to take that seat as soon as the election is certified. And in Minnesota with the death of Paul Wellstone and the appointment of an independent to serve briefly, if you assume that the independent will caucus independently as opposed to Senator Jeffers who caucuses as a Democrat, the numbers will be fifty Republicans, forty-nine Democrats, and one Independent. The immediate implication is that because no vote is required for Senate majority leader, Senator Lott will simply be acknowledged as the new majority leader. On the other hand, in order to

change committee chairs, there must be a vote. So there's at least some possibility that a week from now when the Senate reconvenes we'll have a Republican Senate majority leader and Democrats as committee chairs.

Now, what does all that mean? [Laughter] I think one of the things it means is that there's incentive on both sides to address the appropriation bills. In my view the Democrats will believe that they can't get a better deal next year than they can obtain this year. And my sense is that in the fiscal policy area the Republicans want to address tax policy and want to address it very quickly. My guess is that they do not want to do that in a context where they're looking also at appropriations bills. So there will be incentive on both sides to get that done this year. Therefore, I think there's a real possibility that we may see one single, very large appropriations bill in this interim session.

CHAIRMAN GREENSPAN. May I just ask a quick technical question? What is the incentive, given the vote yesterday, for the President to sign such a bill?

MR. OLSON. I think it's so the Republicans will then be able to move on and focus on tax policy—that is, if he is reasonably satisfied with the dollar amounts in the bill. That would be my guess, that there will be some incentive to get past it for the purpose of moving on with their agenda. When we talked about revenue sharing it reminded me that, when the concept of revenue sharing became law, that was also a time when the Congress had incentive. Because of the accelerating tax rates, there was incentive to build in inflation, and it was a tax policy that we called "progressive" at the time. Fortunately, we've moved away from that era.

In summary, the consumer side, which had been the source of strength in this economy, clearly has deteriorated since our September meeting; and based on anecdotal reports from the bankers I talked with, it looks as if there is no pickup yet on the business side. Assuming that

there is a fiscal policy agenda in the form of tax cut policy, it undoubtedly will not take effect at all in the year 2003. So I think the situation clearly has deteriorated from what we were seeing at the time of our last FOMC meeting.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I'd like to focus on a simple arithmetic implication of the unusual productivity growth that we've been observing, which is that it creates a wedge between the rate of output growth and the rate of input growth. As a result, we have a situation currently in which the recovery, measured in terms of output growth and spending growth, seems if not robust at least acceptable. But if we look at the economy from the input growth side or the factor utilization side, we see a very, very weak economy. Indicators of labor utilization, for example, including payroll employment, the workweek, and production worker hours, have been basically flat for the year. Indeed, I had a comparison done between these series for the current period and the 1991-92 jobless recovery, and they seem to be identical.

Capital is likewise not being used to its capacity. Capacity utilization has not only been flat for the past year, but its absolute level is at near-record lows in the aggregate as well as in many individual industries. In short, the evidence from the input side of the economy suggests that the gap between output and potential output is, if anything, widening rather than diminishing. Continued slowing in core inflation, both at the producer and consumer levels—which I talked about at the last meeting—is consistent with the presumption of a significant output gap in the current economy.

I think there's agreement around the table that in the language of macro textbooks the economy is facing a series of IS shocks—various factors that have inhibited the desire of firms to invest and consumers to buy. The right response to that normally is to stimulate and lower

interest rates still further. The FOMC has been quite patient. We've kept the funds rate unchanged now for almost a year. So I think it is time to consider taking some action. A significant rate cut at this point would not be a panacea obviously, but I do think it would help.

Also, I'd like to take issue a bit with the view that there's a generalized capital overhang. One would think that the story would be that certain industries—like the telecom industry, for example—have so much capital relative to their long-term needs that there is essentially no interest rate at which they'd be willing to invest. If you thought that was the case and if you looked at factory utilization or capacity utilization across industries, you would expect to see most industries close to normal, but with a few sectors at extremely low utilization levels, suggesting that they have tremendous overhangs of capital. In fact, what we have is a relatively normal distribution of capacity utilization across industries—that is, slack is generalized rather than concentrated in only a few sectors. Given the availability of complementary resources, labor in particular, I'm not sure that there can be such a thing as a generalized capital overhang. In any case, I'm more optimistic than Governor Ferguson that interest rate reductions might increase investment spending.

Another positive factor I think worth mentioning is these very weak inventories, which suggest that if spending does increase it will be translated more directly into production rather than into inventory reduction. And finally, in contrast to 1991, there do not appear to be significant financial headwinds in this case, although Governors Kohn and Gramlich mentioned a few issues, to impede the effects of a rate cut at this juncture.

So in short, I don't know about pumpkins, [laughter] but while the economy hasn't fallen down the stairs, I think it could use a push to make it up the next few steps. Thank you.

CHAIRMAN GREENSPAN. I love this econometric language! Mr. Reinhart.

MR. REINHART.[2] Thank you, Mr. Chairman. I will be referring to the materials that were distributed to you during the coffee break. As has been true at the past few Committee meetings and as shown in the top right-hand panel of your first exhibit, market participants expect the federal funds rate to turn a bit lower before moving up in the summer of next year. The nadir of the expected path of the federal funds rate is now a touch lower than in August and September (the left-hand and middle panels), although the funds rate ultimately rises to a level that is about the same as was anticipated six weeks ago. The current situation is unlike that in advance of those previous meetings in another respect, as seen in the middle panels, by the evolution of an estimate of the probability of a ¼ percentage point move as derived from the front-month money market futures contract. At last night's close, financial market prices were consistent with a high probability of action today.

Indeed, as seen in the first two columns of the table at the bottom of the exhibit in the summary of the Money Market Services Survey of policy expectations released on Friday, twenty-five of the thirty-six respondents expect policy easing, with fifteen anticipating a cut of 25 basis points and ten looking for a 50 basis point move. Apparently regardless of the rate action, market participants expect you to retain an assessment of risks balanced toward economic weakness. Moving further ahead, the majority of respondents expect the funds rate to be at least as low as 1¼ percent in late January, with the balance of risks still pointing toward economic weakness.

Thus, the case for holding the funds rate at 1¾ percent today must recognize that, as President Broaddus noted, some market disappointment would attend the announcement of that decision. But you might be willing to accept that reaction. As shown in your next exhibit, your aggressive policy actions in 2001 moved the real federal funds rate, the dark line in the upper panel, from around 4¾ percent at the beginning of the year, to about zero by year-end, where it has been held since.

Although estimates of the equilibrium real federal funds rate, represented by the swath of blue in the figure, have also moved down, you've kept the real rate below the lower bound of that range. The red line amid the blue plots one particular estimate, the FRB/US model's view of the real short rate ultimately consistent with sending aggregate demand to the level of potential output. The spread of the actual real rate below this estimated equilibrium concept has been sizable for some time. Indeed, the bottom panel cumulates the effect of that wedge on the quarterly growth of real GDP (at an annual rate), taking into account the model's assessment of the lags in monetary policy. According to those estimates, monetary policy stimulus began to kick in only by the middle of last year, as policy easing was initially only offsetting the cumulative effect of the real rate running above its equilibrium value for much of the second half of the 1990s. The staff model would suggest that policy easing thus far has been adding about 1¾ percentage points to real GDP growth this year. Given the lags in policy, the Committee's prior actions will continue to impart sizable, albeit waning, impetus over the forecast period.

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

You may not be troubled by the assessment that the stimulus to growth of your previous actions will erode if you also believe that the forces currently restraining spending, including the lagged effect of earlier declines in equity wealth, credit stringency both in markets and at banks, and the enervating effects of elevated uncertainty on household and business confidence, will be lifting relatively quickly. In those circumstances, the current degree of policy accommodation would facilitate a return of the growth of aggregate demand to that of potential output in short order. But that is not the staff forecast, in which events turn a bit gloomier before that rebound in growth materializes.

A mechanical way of responding to that near-term soft patch is offered in the Bluebook in the policymaker perfect foresight simulations, repeated as your next exhibit. In this exercise, the FRB/US model with the extended Greenbook assumptions is taken to be a complete, unerring description of the U.S. economy. As shown in the two upper panels, these simulations entail easing aggressively over the next half year—and then tightening almost as quickly—to work down the resource slack evident in the unemployment rate plotted in the middle panel. By these calculations, policy ease would be called for even if your implicit inflation target was 1 percent (the red lines), let alone the 1½ percent goal depicted by the green lines. Indeed, in this framework, policy ease is necessary to prevent inflation from edging below 1 percent, which might otherwise make the conventional estimate of the mean bias in the PCE inflation rate of 2 percent loom particularly large. Given the concerns expressed at recent meetings of the potential problems posed, should future adverse shocks necessitate putting the real federal funds rate deeply into negative territory, the Committee might have a preference for more of an inflation cushion than that.

If you were inclined to do so, the extent to which you might ease probably interacts with how you would assess the balance of risks at that new stance of policy, the subject of your final exhibit. At the top of the exhibit, I've listed how the Committee described its disclosure policy when it was introduced in January 2000. As noted in the first bullet, the Committee has promised that its statement will express its "sense of risks to the attainment of its long-run goals of stable prices and sustainable economic growth." However, as in the second bullet, that attainment is assessed over the "foreseeable future," admittedly an elastic concept about a "relevant" period that may depend on economic conditions.

A complication that several members have noted at the past few meetings is that the balance of risks assessment has the potential to influence investors' confidence in the economic outlook as well as their expectations of policy. If so, you might be concerned that a policy action deemed insufficiently stimulative to balance the risks might be undercut by an adverse reaction to the policy statement. This interaction of words and action makes it difficult to build the case for easing 25 basis points in that, if you shared the staff's assessment that economic momentum had flagged, such a move would not likely put the perceived risks back into balance. It would only be if you viewed the outlook as having deteriorated a bit—but not as much as in the

Greenbook—that you might see 25 basis points of "insurance" as fostering a better balance to the risks.

Given the staff's assessment of the economy, you might see a 50 basis point move as a closer call on balancing the risks. By way of example, the lower left panels give the FRB/US model's prediction of what would happen to real GDP growth, the unemployment rate, and core PCE inflation were you to lower the funds rate 50 basis points at this meeting and hold it at that level thereafter. This is the "lower funds rate" alternative of the Greenbook, where the blue bars give the alternative results and the red line depicts the baseline outcomes. As indicated in the box at the right, even after ½ point of ease, the Committee might indicate that the risks were still tilted toward weakness because in the near term—that is, before any effects of action today would plausibly leave an imprint on the economy—resource slack builds. Moreover, the uncertainty surrounding the forecast might seem to weigh particularly heavily on the downside.

However, as noted at the lower right, the Committee might put particular weight on the observation that, after policy action, aggregate demand is expected to expand considerably faster than aggregate supply in the second half of 2003 and in 2004, an outcome that might be seen to offset the prospect of declining core inflation if the "foreseeable future" stretches sufficiently far.

It is also possible that the Committee might view action today as better balancing the odds of its own future action, despite whether it saw the macroeconomic consequences of an adverse outcome for spending as worse than would attend a positive surprise. That is, easing today might make it a coin toss as to whether the next move was up or down. Such an interpretation of the risk assessment, though, might not be seen as progress in your disclosure policy. Three years ago, the Committee abandoned the old "tilt" in the directive because it had become too rigidly interpreted in markets as a signal on the next policy action. That completes my prepared remarks.

CHAIRMAN GREENSPAN. Questions for Vincent?

MS. MINEHAN. I'm not necessarily in favor of this position, but I guess I was a little put off or confused by your dismissal of a 25 basis point move. Isn't it possible, in light of the way the Committee has used 25 basis points in the past, that the markets would take that as an indication—particularly with a downside risk statement—that we're going to move more than once?

MR. REINHART. As I stated, there are two roles for the balance of risks statement. One is as an indication on the course of the economy, and the other is an indication of the likely prospects for policy over the foreseeable future. To the extent that markets focus on the latter and see the risks tilted toward weakness as raising the odds of action in December, then a cut of 25 basis points at this meeting with an unbalanced risk statement is going to get them to price in significant odds of an additional 25 fairly shortly.

MS. MINEHAN. The macroeconomic impact can't be much different.

MR. REINHART. From a macro standpoint, if the funds rate is 50 basis points lower by December 10, it's not going to make a whole lot of difference if it got there in one step or in two. But there is the first role for the balance of risks statement that I mentioned as well, which a few members have emphasized over the last couple of meetings, and that is, What will it do to business and investor confidence that the Federal Open Market Committee lowered rates but still sees the risks tilted toward economic weakness? You have to balance the two off.

MS. MINEHAN. Probably nothing different than when we didn't lower rates but said that the risks were unevenly balanced toward the downside.

VICE CHAIRMAN MCDONOUGH. That's what the policy discussion is going to be about.

MS. MINEHAN. Right.

CHAIRMAN GREENSPAN. Further questions for Vincent? If not, let me get started on comments. To repeat some of the issues that I've raised with the Committee in the past, the ability of this economy to withstand so many shocks time after time after time has been extraordinarily impressive. The necessary implication of that performance in my view is the emergence of a degree of flexibility in the economy that was not evident twenty or thirty years

ago. In turn, this increased flexibility strongly suggests that the economy is in a very favorable position to move forward, assuming a positive underlying trend in productivity.

What we have seen in the past several weeks is that this flexibility is reflected in a high degree of price elasticity of demand. In this regard, we would expect and indeed we have observed in a period of repeated shocks that sharp price declines have induced very strong household demand, especially in the motor vehicles area and—indirectly through declining mortgage rates—in the housing sector. In fact, the sense that deflationary forces are being offset by high price elasticity has been evident since the spring of 2000. That's one of the reasons that I believe that the economy, despite having been shocked repeatedly, is still standing even though, as I have indicated previously, it is rather wobbly at the knees.

It appears that GDP effectively has been pretty close to flat over the last three months. In addition, the industrial production index—insofar as we can judge from our weekly statistics and the overall BLS manhours figures—went down in October, although it seemed to come back a bit toward the end of the month. So what we have is an economy that can work its way through what in effect is described in the Greenbook as a "soft spot." However, as Governor Olson indicated, the evident response of motor vehicle sales to incentives seems to have diminished recently and indeed to have disappeared.

What that means is that one of the pillars of spending that has kept the economy in a reasonably forward-moving mode has been removed. Now, it is conceivable that the hesitation in motor vehicle sales is temporary, and it may well be that, if the sales incentives are increased enough, the weakness will prove to be temporary. However, the staff here has endeavored to adjust the sales figures for the changes in incentives, and the adjustment doesn't do all that much for sales. What is clearly the case is that motor vehicle sales slipped below a 15 million

seasonally adjusted annual rate in the last ten days of October. That slippage has removed, at least for the time being, one of the elements of forward momentum in the economy, which I would say is probably essential if we are to get through the current soft spot and in the end come out with the Greenbook forecast.

Fortunately, fairly strong housing starts and underlying housing construction are still providing important support to the economy. Indeed, the backlogs reported by the large builders are moving up at a relatively rapid pace. We also have had fairly strong sales of existing homes. Sales of both new and existing homes have been materially assisted by the persisting decline in mortgage rates, which effectively have followed down yields on AAA corporates and Treasuries. The problem, unfortunately, is that it's not clear how much longer interest rates on ten-year Treasuries will fall. I mention that even though a good deal of the econometrics does suggest that it is the level of the mortgage interest rate and not its decline as such that determines the rate of new and existing home sales. Remember, the sales of existing homes engender a fairly significant extraction of equity directly as a consequence of housing turnover. And clearly cash-out refinancings are also a function of the level of the current mortgage rate in relation to the average rate on outstanding residential mortgages. What this suggests is that there is still considerable momentum in the housing industry because mortgage rates remain low. Moreover, there is unquestionably still very strong cash-out availability as we go into December because applications have gone up very dramatically and there is usually a six-week lag between mortgage applications and originations. Of course, it's the timing of originations that creates the cash-out monies, which as you may recall I said at the last meeting were running at an annual rate of around $200 billion. And indeed that explains a very big part of the rise in mortgage debt during the last couple of years.

There's no question, however, that we are running into downside resistance on mortgage rates, or, to make a slightly softer statement, that the rate of decline in mortgage rates is slowing. In any event, it's hard to escape the conclusion that at some point our extraordinary housing boom and its carryover into very large extractions of equity, financed by very large increases in mortgage debt, cannot continue indefinitely into the future. And indeed I presume that the rise in mortgage rates that has occurred very recently is basically a reflection of the strengthening in the stock market. One can argue that if that's the case, we may be losing something from the home equity side but gaining it elsewhere. So that probably is a wash.

The important issue here is that we're seeing some erosion in the props that support demand in the consumer area, and something else has to take its place. We've all been expecting that capital investment will eventually accelerate as consumer spending decelerates. That probably will happen, but we are still looking. It's very easy to get exceptionally morose about the outlook as the data come in, but there are positive signs.

One relates to corporate profits. To be sure, they are difficult to evaluate. I say that after having spoken to a lot of security analysts and portfolio managers about the consequences of the very dramatic changes in accounting that have been occurring in the last three or four months, indeed since June. It isn't the legislation that is doing anything to create significant changes in accounting. It's the market that all of a sudden is saying that if a firm has a conservative accounting system, it will be rewarded with a premium in its price-earnings ratio. That is exactly 180 degrees from where we were a couple of years ago, and it obviously is having a significant impact on earnings estimates. This means that even if the economy has changed not at all, the mere shift to conservative bookkeeping would induce a significant decline in projected S&P earnings, which indeed it has. The only question is whether underlying profitability is

improving, and the answer to that is apparently "yes." If we look at the NIPA accounts and adjust for the fact that stock options are expensed when they are exercised rather than when the actual opportunity cost is incurred, we get a weaker underlying profit figure than we ordinarily would expect, given our assessment of what productivity is doing and what everything else is doing.

What is happening, as best I can judge, is that these two sets of profit forecasts are now finally coming together. In my view, there is quite a good chance that we are underestimating the outlook for profits in that an upturn is occurring that could prove to be a little stronger than we currently expect. If that turns out to be the case, and I suspect that it will though I cannot say I know for sure, it means that cash flows will be improving and that stronger capital investment will eventually materialize provided the overhang of uncertainty, very specifically the uncertainty relating to geopolitical risks, dissipates. This is a Gulf War scenario all over again. You may recall that when Iraq invaded Kuwait in the summer of 1990, oil prices initially took off. But as the buildup to the fighting with American forces took place, we experienced a progressively more debilitating degree of uncertainty. It took a very significant toll on consumer expenditures and indeed was probably an important, if not the primary, cause of the 1990 recession. We now have the same problem to work through. It's difficult to know when, or even if, there will be another Middle East War. It's very hard to make judgments on this sort of thing. Then, of course, as many of you have mentioned, the European and Japanese economies are not being very helpful, but that's not a big surprise.

In sum, it strikes me that we are looking at an economy that potentially has significant upside momentum if it can get through the current soft spot. And if that's the case, I suspect that the Greenbook forecast will prove to be too low. Because inventories are tight as a drum and

capital investment is going absolutely nowhere, there's only one direction they can go if we remove the current uncertainty. That's a big "if." We can't assume at this stage that those key sectors will lift the overall economy in line with the Greenbook forecast or even that they will produce a positive outcome. We are dealing with what basically is a latent deflationary type of economy, and we are all acutely aware of the implications of that kind of economy. President Broaddus several meetings ago aptly expressed what I think is the consensus of this Committee on the issue of a potentially deflationary hole. It is a pretty scary prospect, and one that we certainly want to avoid.

The question is what we should do at this point. I think it's correct to say that, if we move significantly today—and my suggestion would be to lower the funds rate 50 basis points—it is possible that such a move may be a mistake. But it's a mistake that does not have very significant consequences. On the other hand, if we fail to move and we are wrong, meaning that we needed to, the cost could be quite high. I am not aware of anything that suggests we will not be able to turn our policy stance around if we reduce the funds rate and that turns out to have been wrong. We can turn it around fairly quickly, but I'm not even sure that "quickly" will be all that necessary. What I'm saying is that we can very readily adjust to that kind of mistake. I don't think we could adjust all that easily if we were to fail to move and the economy began to deteriorate and we were looking into a deep deflationary hole.

I don't think 25 basis points is an adequate response largely because it seems too tepid a move for the potentially deflationary situation we face, which is a go/no-go type of situation. We are either going to get it, or we are not. And if we are going to get it, 25 basis points doesn't seem to be the right response. If we are not, we're going to have to reverse either the 25 or the 50, and I'm not sure that matters all that much.

Assuming we decide to lower the funds rate by 50 basis points, the tricky question in my view is whether we move to a balanced risks assessment or retain the current tilt toward weakness. We haven't moved the funds rate this year, and first moves historically have tended to elicit a greater response than we generally expect. I'm worried that we can readily be seen as doing too much in that we can inadvertently create a psychology and concern that says "the Federal Reserve knows something that we don't know." As Vincent just discussed, the issue of our balance of risks statement and its presumed psychological effect is a very tricky question because we're supposed to be deciding on our actions independently of how the market is going to respond. Yet we know we can't do that. As a practical matter, we have to take actions that include our assessment of the market's response to our statement regarding the balance of risks. And even though I think we can make arguments that the risks to the economy, even after a 50 basis point move, may well remain tilted toward weakness, I would be very much disinclined to indicate that in our statement. First of all, it may not be true because the risks after such a move may in fact be balanced in terms of the outlook for the foreseeable future. Nor do I think keeping the present tilt toward weakness would add anything. We don't need to enhance our credibility at this point. In sum, the benefits of retaining the current tilt toward weakness in my judgment are very small, and the risks of misinterpretation are very high. Accordingly, I conclude that going to a balanced risks statement is appropriate if we do 50 basis points. There are other possible combinations, which I endeavored to think through to a greater or lesser extent. I believe, after listening to the Committee's discussion, that lowering the rate by 50 basis points and going to balanced risks seems to average out close to the Committee's consensus. I hope I'm right, and so I raise the issue for discussion to find out. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Thank you, Mr. Chairman. Not surprisingly, I do think that you're right, but let me explain why. It seems to me that it's very clear from the discussion around the table that we need to take out insurance against the downside risks in the Greenbook forecast and in everybody else's forecast that I heard. When one is taking insurance against downside risks, one should take out the amount of insurance that is appropriate; 25 basis points simply is not enough. First of all, the immediate market reaction to 25 basis points slanted toward weakness would be that the Committee is composed of a bunch of wimps, which is not an attractive assessment for a group that is supposed to be a very important public body. But second, the market would immediately crank in an assumption of another 25 basis points either in the intermeeting period or at the December meeting, which would be considerably more destabilizing than doing the right thing in one move today. Why would we say that we'd go with a statement of balanced risks? Well, if taking out insurance against downside risks is what we're about, which I think it is, the whole purpose of that is to balance the risks. If 50 basis points is the right number, it should balance the risks. If it isn't the right number, we should use a bigger number, which I don't think is necessary. If we did 50 basis points with the balance of risks toward weakness, in the first place I think it would be wrong. In the second place, it would scare the hell out of everybody. I can assure you, as your man in New York, that if there's anything of which I'm certain after many years of being in markets, that would scare them; that would be very, very unwise.

Now, I think a legitimate question if we go with 50 basis points and a balanced risk statement is, Does it tie our hands? I don't think so. It certainly doesn't tie our hands if in fact we took out insurance and didn't need it. That would be good news. That would be great, and everybody would cheer, starting with us. So it certainly doesn't tie our hands in that direction.

On the other hand, if at the next meeting or the meeting after that we decided that the situation was deteriorating further and we had to take out more insurance or we wanted to make a more normal non-insurance move, our hands would not be tied either.

So it seems to me that the recommendation that you have given us is the right and prudent thing to do, and it in no way prohibits any action that we may wish to take in the future. Thank you.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you. I think the Vice Chairman's description of the virtues of 50 basis points and balanced risks versus 25 and the risks tilted toward weakness is correct, and I won't repeat that. But to me the issue is more one of a change now versus no change. And in the spirit of what Gary Stern said earlier about what one thinks one knows with some confidence, for me it is this: If I look at the sentiment surveys, the risk premiums in markets, and the inversion of the yield curve on the front end, and if I listen to the anecdotal information about uncertainties and fears—and give very little weight to the pickup of the stock market in October, though I wouldn't dismiss that entirely—it seems clear that the natural rate has moved down. When the natural rate moves down with an unchanged intervention rate, it means that the de facto stance of policy has at the minimum become less expansionary and possibly restrictive. I don't know which is the case here. I may not go as far as Bill Poole might on what is the desirable growth in nominal money measures, but I do believe that in this environment less stimulus or a deceleration in monetary growth, if it were to occur, would be undesirable. So I prefer going with a 50 basis point cut and a balanced risk statement.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, given the uncertainty in the economy, which you described in your remarks, I would accept and in fact would support a move of 50 basis points if we are going to move at all. And since we are dealing with the issue of uncertainty, I think having a balanced risk statement is a prudent way to do it. So I support you in your recommendation.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. I also support you. Let me give my reasons. First, given what we've seen in terms of the incoming data, the marking down of forecasts, et cetera, it's important for us to maintain the same degree of stimulus that we had before at our last meeting. If we look at and visually adjust exhibit 2 in Vincent's handout, both the top and the bottom charts suggest that 50 basis points is the best way to do that. That, I think, picks up what Jerry Jordan was implying and perhaps others as well. Second, on the balance of risks statement, boy-oh-boy am I glad we adopted that procedure! [Laughter] Having labored with many of you on it and having listened to Vincent's interpretation, I am comfortable with a balanced statement with respect to the risks because of what he has shown in the bottom portion of exhibit 4. And I was not being facetious about being glad we decided to include the risk statement in our announcement. I think it's helpful that we got away from signaling things between meetings, though I realize it leaves some other kinds of uncertainties. But by and large I think if we do a 50 basis point cut— looking at the forecast Vincent has shown for the 2003-04 period in the lower funds rate path scenario—one can intellectually, credibly support a balanced risk statement. I will leave it to you and President McDonough to talk about the market psychology. I can't disagree with what you both said. It seems credible.

There's a slight misunderstanding between Ben Bernanke and me regarding what I was saying earlier. I don't think I'm disagreeing with you, Ben. I firmly believe that making these adjustments will help businesses to lower the cost of capital and to get refocused on the need to make further investments going forward. I'm not sure that we disagree at all. We can talk about that later. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. I support a cut of 50 basis points. I'm delighted to support 50. I, frankly, would have a modest preference to retain the asymmetry in the risk statement because I think to go 50 and move to balance makes us look too confident that we understand the situation. It seems as though we're saying about the patient, the sick economy, that we're going to do this, and certainly that ought to be enough for you! And it may look too fancy, as if we're trying to fine-tune the dosage. But this is not a big issue with me, and I've had enough of being a curmudgeon; so I'll support the 50 and a balanced risk statement. [Laughter]

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support both parts of your recommendation. As for the 50 basis point cut, I think we need it. Recent data are sufficiently worrisome and the most likely forecast is sufficiently tepid to justify 50 basis points. And I do think it would feed through to long-term interest rates. Looking at Vincent's chart of the upward-sloping expected federal funds rates, if the markets see us moving a little more aggressively, I think that could flatten that chart out a little, and the effect would feed through to longer-term interest rates. And for the reasons that Governors Gramlich and Bernanke noted, I think that would help the economy.

I was particularly taken, Mr. Chairman, by your description of the costs of missing on either side. With a sizable output gap and low inflation and inflation expectations, the odds on easing so much now that we produce inflation down the road seem very, very small. But if weakness persists or if the economy is subject to a downside shock, the costs of moving too timidly at this stage could be considerable.

On the balance of risks, this is a tough call in large measure because, whatever we do, sluggish growth and declining inflation are the most likely outcome for a few quarters. But in my mind the more aggressive action does buy a degree of assurance about more-satisfactory outcomes over the slightly longer term. And from that perspective, however murky it may be, the risks may well be about balanced. Moreover, I am concerned that retaining the unbalanced risk assessment along with a 50 basis point reduction in rates could leave the impression that the Federal Reserve sees the economic situation as more serious than I believe it probably is and that we're willing to cut rates further than I believe we should with the information now in hand.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. At the last meeting or maybe even at the last two meetings, I could have gone with a 25 basis point reduction in rates and called it insurance. So I'm clearly in the camp of reducing rates. And given the incoming data, 50 basis points probably is a better insurance policy than 25.

I find this discussion of the balance of risks pretty tricky. On the point that Vincent included in exhibit 4—that the Committee might retain unbalanced risks if in the near term resource slack is expected to build—whether we reduce the funds rate by 50 basis points or not, resource slack is expected to build in the near term. Even the GDP growth numbers shown in the forecast for 2003:H2 are not robust, though I guess they do get back to 4 percent by then. But

GDP growth in H1 is still going to seem rather slow, and that time frame is my definition of the near term.

As you know, I meet with a group of investment professionals before each FOMC meeting, and I have to echo a little of what Bill Poole said about a move of 50 basis points. These observers felt that the outlook was dicey enough that their sense was a cut of 50 as opposed to 25 might make a negative splash in the market. In their view, 50 might make people even more uncertain and concerned, and they might think that we see something worse than they see. I think the balanced risk statement helps to offset that. So I'm a little at odds with the logic and the market impact of your recommendation, but I'm willing to go along with it.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I think we face a different situation from the one we were facing a year or so ago when I made the comment that you referred to. So, if I had my druthers, I personally would continue to be patient a little while longer than Jack Guynn and Tom Hoenig suggested. But if we ease—and I have thought through this as I expected that the Committee would ease this time—I have a strong preference for a ½ point reduction rather than only a ¼ point reduction. A 50 basis point drop would be decisive. I think it would give us a fighting chance of preempting the downside forces that you discussed and that I recognize certainly exist in the economy. To me a ¼ point move would be the worst of the three alternatives laid out in the Bluebook because I think it probably would raise the most doubts and uncertainties about monetary policy going forward. So I'm comfortable with the 50 basis points. I think we need to act decisively rather than tentatively.

On the tilt, I must say I'm a little ambivalent. I wish I had more time to think through this issue of the risk statement, but my instinct is that we ought to leave it unbalanced. I say that

mainly because, if we're going to ease and accept whatever longer-term upside risks may flow from that, I'd like to maximize the chances that this policy action is going to do the job completely. This is not an issue that I would fall on my sword over, but I personally would have a preference for retaining the tilt toward weakness.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, to me it makes a lot of sense to go with the 50 basis point cut, one that is large enough to have a noticeable effect. My main concern about this large cut is that it might send the message that the economy is weaker than we currently think. But by adopting a risk assessment that is balanced I believe we mitigate that possibility. So I think in combination it's the right choice.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Mr. Chairman, I support the 50 basis point reduction in the funds rate target. I think there's a good chance that it's the right thing to do. But even if it's not, as you already suggested, the risks of taking this action seem low basically because of the situation in which we could find ourselves with regard to productivity and current and prospective inflation.

As far as the balance of risks is concerned, despite the nature of the disappointing news coming in, I suspect the risks aren't all that unbalanced to begin with. So I have no problem with moving to a balanced risk statement.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Mr. Chairman, I support the recommendation to cut the funds rate by 50 basis points. I agree with the argument that 25 basis points would lead to market expectations that another 25 is coming, and I think it's much better to act decisively. Yes, it's probably true that some people will say in reaction to 50, "Oh my God, the Fed thinks the economy is really

very weak." That may well be the interpretation of some. But I think the reaction of others—that we are acting decisively as we have in the past—will overwhelm that concern.

There are always risks. We've talked a lot about the downside risks and what a pickle we would be in if they were to accumulate. On the upside risks, I think it would be absolutely delightful to deal with upside strength, [laughter] but we're not discussing that situation. There is no question that we would be able to increase rates in time. We have a lot invested in inflation credibility, and this is the time to take some return on that capital. I just don't think there's any issue on that whatsoever.

I would not myself go for the balanced risk statement. I believe the market interpretation of the balanced risk statement would probably have two pieces to it. First, that we're making a statement that we're finished reducing rates. As I see it, that would minimize the chance that the reduction would carry into longer-term rates. Second, it may appear awkward if incoming data remain weak over the next few weeks, which I don't think is beyond the realm of possibility at all. The balanced risk statement would then raise questions as to our judgment about the outlook because I think it would be interpreted in the light of the data we see in coming weeks. So in my view the best course would be to retain the tilt toward weakness. To introduce something new that appears to cut in the opposite direction of the 50 basis point cut would be more confusing than helpful to the market. So I'd simply leave that part of the statement alone.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I agree with both parts of your recommendation. I believe it is a good insurance policy against downside risks. On the risk statement, it's a close call, but on balance I think it is better to go the way you suggested in order to reduce the unintended negative consequences if we were to keep the tilt toward weaker economic growth. I

agree with Bill McDonough in that I don't think this precludes us in any way from doing anything in the future if we had to. I certainly agree with that.

I do want to pick up on one point that Bill Poole talked about, and that is the issue you raised that this economy may turn around more quickly than we might anticipate. We all certainly hope it does. What that means is that we do have to be careful because, if the economy does turn around quickly, we have to be willing to raise rates at the appropriate time. We all know it's a lot easier to cut rates than to raise them.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support your recommendation. I see the two parts of the recommendation as essentially and necessarily together. I'd feel a little less comfortable with the notion of 50 basis points and the risks toward weakness because I think the market would respond as several people have suggested. The alternative of a slightly more positive touch with 25 basis points and a tilt toward weakness had some appeal to me, and I struggled with that. President McDonough suggested that favoring that would describe me as a wimp. I would prefer to think of it as being relatively conservative and deliberate. [Laughter]

VICE CHAIRMAN MCDONOUGH. There's a difference? [Laughter.]

MR. SANTOMERO. In any case, I think it clearly is necessary that we respond to the economic forces as we see them. So I can indeed support the recommendation.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I can support the recommendation. I would be more than a little uncomfortable with 50 basis points and the continuation of an asymmetric risk assessment. I hope we can use the press statement to suggest that we know how to look beyond the next couple of data releases and that we see a better economy down the road. I wish I were a

little surer and more comfortable with exactly how a policy change of this kind works its way through to both long-term rates and to the shorter-term consumer spending that is interest insensitive. It's not quite as clear to me as it seems to be to others that that will work. I have always hated to disappoint my kids at Christmas time. I suspect there is a Santa Claus, but he may not be able to deliver quite as many presents or as big a package this year. So I have some doubts that monetary policy really works its way through the various sectors quite as cleanly as some people suggest. But I can support the recommendation, and I understand the arguments that have been made.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Mr. Chairman, I support the recommendation to go down 50 basis points on the funds rate. I think we need to show that we are ahead at this point in the economy. I find it a little harder on the balance of risks statement. One of the reasons—using some of the words that Vincent put in his handout—is that we talk about the foreseeable future. As a group we have come to the conclusion that the economy is at sort of an inflection point where we think there is weakness in the very short term but going out further in our forecast period we see more strength. I can support the balanced risk statement, but I think it's important to indicate that the "foreseeable future" is beyond the next meeting because some people tend to look at the risk statement as a signal about our likely policy stance at the next meeting. So if we can talk past the short run in the press release, I think that would be helpful.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. When I began reviewing the Greenbook information, I had a reaction to it that I didn't expect. As I was reading through it, I heard the theme that the current news is disappointing, but the economy was still seen as poised for accelerating growth at some point in

the future. And it struck me that I had been reading that same thing time after time after time. As I thought about that, it seemed to me that it was not a reflection of our ability to model nor a reflection of our ability to understand the data. I think we are reading the data accurately. But in every other environment I've ever experienced in my life, that sequence just screams "do something!" Now, this is the first time I've been in a monetary policy environment, so I came into the meeting trying to get an understanding of what the downside risks would be of an aggressive move. And I think I'm persuaded that the downside risks of moving the funds rate down are fairly well mitigated. Also, a balanced risk statement seems to me to suggest what we've been saying all along, that the fundamentals are still in place for a turnaround. So I support both parts of the recommendation.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Mr. Chairman, I also support both parts of the recommendation. I think 50 basis points is just right. I would be less concerned about retaining the bias toward weakness on the grounds that the market survey data suggest that there's essentially a universal expectation that we will retain that bias even when people anticipate a 50 basis point decline. So I don't think that we would create a shock. Nevertheless, I defer to those who have been in markets and understand their deep psychology. So I do concur with the recommendation.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I agree enthusiastically with your recommendation of 50 basis points. I think the way the bias is usually interpreted the more honest thing to do is to keep the bias in a downward direction. But I agree with Governor Bies that, if we could make it clear that we're looking some distance out in the future, then it would be okay to go to a balanced risk statement.

And I do want to make it balanced because of the considerations that Bill McDonough mentioned.

CHAIRMAN GREENSPAN. Okay. Would the Secretary read the language?

MR. BERNARD. This language is on page 12 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 reducing the federal funds rate to an average of around 1¼ percent."

With regard to the balance of risks sentence for the press statement: "Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the Committee believes that the risks are balanced with respect to prospects for both goals in the foreseeable future."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
Governor Bernanke	Yes
Governor Bies	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Jordan	Yes
Governor Kohn	Yes
President McTeer	Yes
Governor Olson	Yes
President Santomero	Yes
President Stern	Yes

CHAIRMAN GREENSPAN. I'd like to take a short recess and ask the members of the Board of Governors to gather in my office to act on the requests on the discount rate. In the interim we can distribute the draft press statement and ask everybody to take a look at it.

[Recess]

CHAIRMAN GREENSPAN. The Board members need some time to read the statement. Questions? President Jordan.

MR. JORDAN. The first paragraph mentions the discount rate action but without identifying the Reserve Banks whose pending actions have been approved. Is that going to be added?

CHAIRMAN GREENSPAN. That will be added. There are two Banks requesting a 50 basis point reduction, New York and Dallas. The standard procedure, as you all know, is that others come in later in the day or the following day. There is a question, in fact, given the introduction of our new procedures early next year, as to whether we should be doing anything differently now. I think the general consensus is that it's far better to stay with exactly what we've been doing. And then on January 9, we will make the actual change when we move to the new Lombard rate discount facility. If there are no further comments, I'll assume this draft statement is adequate for our purposes. Now, let me ask Vincent what his view is as to the time needed for the next agenda item.

MR. REINHART. Well, it might be more efficient to have this discussion over lunch.

CHAIRMAN GREENSPAN. Yes, that strikes me as a far better approach than to continue without lunch.

MR. REINHART. That will be an FOMC discussion, however.

CHAIRMAN GREENSPAN. So we don't close the meeting.

MR. REINHART. We don't close the meeting.

[Brief recess]

CHAIRMAN GREENSPAN. Dino.

MR. KOS. Thank you, Mr. Chairman. Recently, Vincent Reinhart and I sent a memo to the Committee on the SOMA alternative assets study. Before we turn to the main part of today's discussion, let me just remind you that in March we sought guidance from the Committee on prioritizing resources for the continuation of our work on this issue. At that time the Committee instructed the staff to focus first on the possibility of buying Ginnie Maes outright for the portfolio and second on the possibility of accepting foreign sovereign debt as collateral on repos. But Committee members indicated that to the extent there was a resource conflict—and there was—the staff was to finish contingency planning for tri-party repos at our third site.

So from the time of that meeting through about the August-September time frame we were focusing almost exclusively on finishing the work on contingency planning, and only recently have we begun to look at the issues of how Ginnie Maes might fit into our outright portfolio. Given that limited amount of time, most of our work has been in the area of preparatory planning—thinking about how long certain tasks might take, especially some of the settlement accounting, front office work, risk management, and very critically the systems changes that might need to be made. Each of these issues is surmountable, but the work involved is time consuming. And if the Committee were to approve expanding the allowable assets in the System Open Market Account to include Ginnie Mae securities, the time before we actually would begin buying them would be measured not in weeks but more likely in months and quarters. It probably would take at least eighteen months or so before we could make all the necessary arrangements and begin to implement such a decision.

In the interim, another element of the work that the FOMC had commissioned is ready for the Committee's review, and that is the study the staff has finished on the auction credit facility. Rick Lang led that work, so let me turn the floor over to him to describe the paper on that issue, which you also received recently.

MR. LANG. Thank you. The report distributed to the Committee on October 8 follows up on the January 2001 SOMA study to explore several issues. These include the structure of auctions of term discount window advances and their coordination with Desk operations; the perspective of bank supervisors on the risks posed by an auction credit facility (ACF); the methods proposed to control credit risk to the Reserve Banks; and the effect of ACF advances on Federal Home Loan Bank advances. In addition, at the request of the Crisis Management Steering Committee, the report considers whether an ACF could be used in a contingency as a substitute for the Desk's open market operations.

The structure of ACF auctions could be quite simple or more elaborate, and there is in fact a fair amount of detail in the report about that. A simple structure would be preferable when first introducing an ACF. The report concludes that auctions of term advances could be easily coordinated with Desk operations and could be effective in supporting the secular growth of currency on the Fed's balance sheet and handling seasonal swings in the demand for currency and reserves.

In consulting the supervisors about the issue of risk, those supervisors on the working group expressed concern that, if banks were permitted to borrow very large amounts from the ACF without any constraints, that could pose liquidity risks to banks that might create a "too big to get downgraded" issue. That is, examiners might become reluctant to downgrade a large bank's CAMELS rating if that risked making the bank ineligible to roll over its ACF funding. Supervisors also noted that the Fed would shift from being an occasional lender of last resort to having an ongoing lending relationship with banks under an ACF. This might pose a potential conflict between using an ACF in the implementation of monetary policy and rating banks independently of monetary policy objectives. Supervisors stressed that such concerns could be substantially reduced, though perhaps not entirely eliminated, by keeping an ACF relatively small and by establishing the same set of risk controls that would be applied to reduce the Fed's exposure to credit risk. Bank risk-taking, risk to the FDIC, and credit risk to the Fed could be limited by establishing a variety of controls that are described in the report. Those controls include restricting eligibility to financially strong depository institutions and imposing limits on how much each institution could borrow.

Even with these risk control measures, however, the report notes that extending ACF advances to a number of depository institutions would increase the likelihood that the Fed would at some point have to deal with an institution whose condition deteriorates so rapidly that FDICIA guidelines apply. Therefore, the report suggests that the Fed would want to consider developing special procedures for dealing with such an event.

A contingency auction credit facility or what we call a CACF would share many features of an ACF, but differences in the purposes of the two facilities and in the circumstances surrounding their use would require some different features as well. Those, too, are discussed in detail in the report.

Compared with backup facilities that duplicate the Desk's open market operations, a CACF—like other discount window facilities—would broaden the range of counterparties in an emergency as compared with simply the number of primary dealers. In addition, a CACF would not be limited to dealing only in narrow classes of collateral, which could also be important in an emergency.

The report considers two emergency scenarios. In the first, in which financing markets are functioning but the Desk and its contingency facilities are not, a CACF could be an effective backup to the Desk in providing a predetermined aggregate supply of reserves to the banking system. A CACF could be similarly effective in the later stages of a more widespread crisis if many participants in financial markets were able to return to normal operations but recovery of the Desk's operations were delayed. In the second scenario, in which financing markets are severely dysfunctional at the same time the Desk's ability to operate is impaired, a CACF would more likely be used to elastically supply funds to depository institutions at a fixed interest rate. In such a scenario, the emergency primary credit facility would

likely be as effective as or easier to use than a CACF. The main appeal of the CACF over other types of discount window lending in that type of scenario would come from its ability to visibly provide Fed credit earlier in the day, which might have a more positive effect on bank and market behavior during an emergency.

The report identifies several open issues that would have to be resolved if these facilities were to be implemented, and I will not go through all of those. In concluding, I want to acknowledge the efforts of the people who helped prepare this report. The group included Jim Clouse, Bill Nelson, Michael Martinson, and David Wright of the Board; Spence Hilton, who drafted a large part of the report, Sandy Krieger, and Bill Walsh of the New York Fed; Lois Berthaume from Atlanta; Chris Moore from Cleveland; Bob Hankins from Dallas; and Steve Meyer, who also drafted a large section of the report, from Philadelphia. My thanks to all of them for their work. That concludes my remarks.

MR. REINHART. Let me conclude the staff portion of these remarks by explaining what Dino and I hope to get from the Committee this afternoon. Basically, we'd like your advice on what portions of five different items you want us to continue to work on and what time frame, if you do want us to work on them, you think would be reasonable. Specifically, we're asking whether you want additional study on (1) purchasing outright mortgage-backed securities underwritten by Ginnie Mae; (2) acquiring foreign sovereign securities as collateral for temporary dollar transactions; (3) developing an auction credit facility to complement Desk operations; and (4) using an auction credit facility to substitute for Desk operations in an emergency.

The fifth item concerns the publication of the materials that the staff presented to the Committee in January 2001. As you recall, at that time there was a desire to get those materials into the public domain to inform both the academic and the investment communities about the options the Committee was looking at. In addition, it seemed desirable to have those in academia and the markets think harder about the issues the System should consider in determining what to put on the books of the System Open Market Account. So the fifth item we're asking for is approval to publish this staff study in the upcoming intermeeting period once final edits are completed. We're not seeking a vote, as this study is not an official document of the Federal Open Market Committee, the Federal Reserve Board, or Federal Reserve Banks. We intend to include a foreword to the document that will make that explicit. The foreword will also include an explanation that the study is a historical document that represents what we understood in January 2001 and has not been updated. That needs to be said in part because of—and the Committee hasn't discussed them—some procedural changes that have evolved since then, including importantly the adoption of the Lombard facility. If you have any particular advice about what else should be in that foreword, we'd appreciate having it. In summary, those are the issues on which Dino and I would like to get your views today.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, starting out with the fifth point, it seems to me that it is a very good staff study, and I hope that it will be released at some point for public comment and discussion. As for the options suggested for additional study, I favor consideration of the purchase of Ginnie Mae securities. Where such fully federally guaranteed debt is available, there is a presumption, I believe, that it should be included in our portfolio. And if I remember correctly, at our previous meeting there was considerable support for looking at that alternative. I also like the proposal for the ACF. It seems to me that the experience we would get from the ACF would be useful for creating a contingency ACF if that were needed. Given current projections for the federal budget, however, we are not pressed for time on these alternatives.

CHAIRMAN GREENSPAN. You say that with a smile? For the official record, we will indicate that he smiled. [Laughter]

MR. PARRY. It may be useful to initiate small Ginnie Mae and ACF pilot programs in order to gain some experience. You asked also about the timing. I would suggest, somewhat arbitrarily, six to twelve months of further study of those two options and a subsequent update to the Committee.

CHAIRMAN GREENSPAN. Before we proceed, could I just ask a question? I, too, think that it is worthwhile publishing the study. Does anyone have any objections to that?

SEVERAL. No.

CHAIRMAN GREENSPAN. Can I assume that it's the Committee's judgment that we do so?

VICE CHAIRMAN MCDONOUGH. The Committee's informal judgment.

CHAIRMAN GREENSPAN. Yes, informal judgment. It's the separate judgment of individual members of the Committee. Is that correct?

VICE CHAIRMAN MCDONOUGH. Yes.

MS. BIES. Mr. Chairman?

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Vincent mentioned that when this study goes out to the public it would have a cover memo or foreword. I think it would be helpful to note that we are changing the way a lot of our facilities can work, requiring perhaps different types of facilities. We might note why this would involve removing the stigma from borrowing. The banks would be posting collateral and might be looking to manage that differently. I think we at least ought to acknowledge that the Lombard facility is going to be introduced. I wasn't around for the Committee discussion of these papers, and I'm not sure if the Lombard facility was anticipated. But just a few comments in the cover memo about how that study relates to where we're moving on the Lombard might be helpful in order to make that current.

MR. REINHART. Right. We can include that in the foreword and also in the first footnote to the ACF discussion in the study itself.

MR. LANG. Governor, if I might comment? We didn't know at the time that the System was going to proceed with the Lombard facility. But within the ACF or discount window alternatives portion of the study, there was a comment that the ACF could work with either an adjustment credit or with a Lombard style facility.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. My Chairman, not unrelated to the fact that a lot of the work done on these studies is done by people at the New York Reserve Bank, I would suggest that we ask the staff to concentrate on the Ginnie Mae study and get that done at some reasonable pace. After that is brought back to the Committee to look at, then we could decide

whether there is a need to move on the other studies. Otherwise, I think we're overloading the staff unnecessarily.

CHAIRMAN GREENSPAN. There's also the interesting question as to the relationship between the Ginnie Mae study and the reasons for the study. Remember, we started off with a presumption that we'd have a shortage of Treasury securities.

VICE CHAIRMAN MCDONOUGH. Yes.

CHAIRMAN GREENSPAN. We had a worthwhile discussion because there was a probability that such a shortage could happen. That probability is now gone for the foreseeable future. But the issue of whether Ginnie Maes should be part of the SOMA portfolio is a separate issue.

VICE CHAIRMAN MCDONOUGH. Exactly. That's why I think that is worth pursuing.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. I agree with the Vice Chairman's recommendation. It seems to me that acquiring Ginnie Maes is a very natural extension of what we're doing now. We already buy full faith and credit paper; it's not obvious why we're not buying this other full faith and credit paper. I think it also may be a useful pilot project for learning how to outsource some of our functions, dealing with more-complex securities, and dealing with other intermediaries. So I think we'll learn a lot by studying this that might be useful sometime down the line.

I also think the ACF work is terrific, and an ACF has a lot of appeal. But we've put into place some other emergency facilities, including the emergency primary credit facility associated with the new Lombard facility and backup for the Desk. So I don't feel that we need to develop an ACF in order to get a CACF the way I thought we did a year or two ago. We have other

backups now. So the ACF is a more radical proposal in a sense. It has more problems associated with it, though I like the proposal if we have to go that way. And I certainly thank Rick and his people for the incredible amount of work they did on this paper. We can keep it on the shelf and come back to it and see whether we think it's a good idea once we deal with the Ginnie Mae issue. So, I agree with the Vice Chairman.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I'm on board with the Ginnie Maes. I think it makes sense. I said that when we met in early 2001. I'm interested in a little more study on the ACF issue. Looking at the federal debt projections, the need for that kind of facility has been pushed off, so I certainly recognize that we're not in a rush. But I think it also is something we ought to give more thought to and establish a time frame for further study. Maybe, as Bob Parry said, twelve months or so is appropriate. In any event, it would be very helpful in my view to work out some of the details should we come to a point where we want to look at the ACF alternative more seriously.

You asked about the foreign sovereign debt issue, and I don't know that anyone has commented on it. I thought the inclination last time was not to go in that direction, partly for political reasons and especially if Ginnie Maes proved workable or if we decided to keep the ACF as an alternative. So I would put the foreign sovereign debt contingency on hold as well.

And I would like to add my kudos to the quality of the paper on the ACF. It was really great. In terms of addressing the technical questions that are outlined in that memo, which I recognize are important, the staff wouldn't necessarily have to come back to the Committee for discussion. But if you want our comments, we could send them to you

MR. LANG. Certainly that would be helpful.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I still think the best substitute for Treasury securities is no substitute, but I'll leave it at that because of the reaction I got the last time I tried to push that view. I agree with others who support the further study of Ginnie Maes. That certainly seems to be a natural thing to do. They're essentially equivalent to Treasury securities.

Personally, I have strong reservations about the auction credit facility either as a complement to Desk operations in normal times or as a substitute in an emergency. This is in no way a comment on the staff study. I thought the study was very helpful, Rick, in our efforts to think through these issues. Clearly, this kind of facility would have an advantage if we were in a situation where we had to add a lot of reserves to the system, given the limitations on the volume of Ginnie Maes available for purchase.

The ACF would be an alternative; I recognize that. But there are at least a couple of very significant problems and, obviously, they were cited in the study. First and foremost for me, I think an ACF could seriously compromise the ability of our supervisory staff to downgrade a larger institution when that might result in its loss of access to an ACF facility. I think, in practice, it would be very, very difficult to keep adverse information on a banking institution confidential. So by establishing an ACF we would be creating potentially a "too big to downgrade" problem, which is a situation I don't think we want to get into.

To me, this is a serious enough problem that I would not want to pursue this course further. Frankly, with the reemergence of federal deficits, I don't think anyone expects a lack of Treasury debt to be a problem any time in the foreseeable future. And if the facility were available, I think it would be tempting to use it for other purposes. In particular, we might be tempted to use it if the economy weakened sharply and we were either at or near the zero bound

and needed to add a substantial quantity of reserves in such a situation. But it would be precisely in that kind of environment where significant danger would arise if we were reluctant to downgrade problem banks.

With particular reference to the proposal about a contingency ACF for emergency situations, at this point I don't see any great advantage in that if I understand it correctly. We have this new Lombard facility coming in with a provision that would allow the Reserve Banks to drop the discount rate to the funds rate in an emergency situation. So I guess I don't see what this facility would add to what we would have in place once the new Lombard facility is introduced.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I'm close to where President Hoenig is. The Ginnie Maes make sense to me, and I think we should continue to pursue how that might happen. And I believe it would be useful to look at the ACF alternative in direct comparison with Ginnie Maes to see why we would need the ACF if we had Ginnie Maes. On the question of whether or not we need a CACF as a contingency arrangement I think we should turn to Governor Ferguson and say, "Do we have enough contingency arrangements?" If his crisis management group wants to take the CACF off the table because it's no longer perceived as necessary, that's fine.

We should remember that, with the Treasury's auctioning of TT&L balances, we actually have had a lot more experience over the last fifteen months than we had before about how such a system would work. In many respects the ACF could be viewed as that kind of structure. So, my preference would be for the staff to continue with the Ginnie Maes, which are a logical extension of our current practices, and to do a little more homework on the ACF. I'd have the staff come back to the Committee and say, "Here are the costs and benefits of each of these, how

do you wish to proceed?" And in that sense my view comes closer to President Parry's in terms of looking at both of them for a while and then figuring out where we want to end up.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. I tend to think we should focus on the Ginnie Maes. I'd have the staff do that study and bring it back to this Committee and then we can decide whether that's sufficient to address the problem or not.

I have some questions about whether we need an ACF. Given resource constraints—and since we have plenty of time here as we all know—my preference would be to start with the Ginnie Maes, get that done and assess that, and then decide whether any further work is necessary. Also, let me note that our Bank does have some technical comments on the ACF, which we can send in, just to put a marker down for future use. And on the contingency ACF, I have some questions, too, as to whether we really need it at this point, given everything else we've done.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you. I think I'm generally with President Moskow and others. I would put much more emphasis on Ginnie Maes since we understand the legal ramifications there in that they are public securities. They're a step away from Treasuries but not that big a step.

I would be cautious about an ACF, and I am very concerned, as all of you know, about resource utilization. Therefore, I would tend to downplay that alternative—not that it's unimportant and not that we don't already have a lot of good staff work done. But I'm worried about all the other competing resource requirements. So I would agree with the suggestion of President Moskow and others to postpone further consideration of the ACF.

With respect to the contingency ACF, I think two of you have asked the relevant question. Governor Kohn and others have already suggested an answer, which is that given the general amount of work that has already gone into developing backup facilities, the CACF is not likely to reach a high priority in our thinking. The contingency planning group has made a large investment, both physically and intellectually, in a number of other approaches, including the Lombard facility. So given my general responsibility for contingency work, I would be very comfortable taking the CACF off the table at this stage. Again, good work has been done on this; our understanding of it has moved beyond where we were when we put that idea on the table. So in conclusion, I think Ginnie Maes should be where most of the staff work is directed. All the other alternatives I would say can now be delayed for some time.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I'm in favor of what Governor Ferguson, Governor Kohn, and President Moskow said. I'd do the work on the Ginnie Maes first and learn from our ACF effort but put it on the shelf. If people have comments on it, fine, submit them. Also, when we put the staff studies out, they do mention an ACF type facility, though nowhere near 137 pages are devoted to it as in the paper we received recently! [Laughter] It is mentioned, so perhaps we'll get some response from those in academia or others on how they see some of those facilities. I think that might be instructive.

CHAIRMAN GREENSPAN. Anybody else?

MR. GUYNN. Mr. Chairman, I too would agree that the Ginnie Maes should be our first priority. It seems to me that foreign debt has a whole host of risks associated with it—political, credit, and exchange risks. I like the way that Don Kohn and Al Broaddus particularly talked about the ACF and the CACF. I think we could come back to them after we have some

experience with the new Lombard facility and perhaps make that facility even more usable in an emergency situation. So I agree that we should put both aside for the moment and come back to then later if we decide we don't have adequate coverage.

CHAIRMAN GREENSPAN. Anybody else? Do you have an adequate response on this?

MR. REINHART. We have more than sufficient direction, Mr. Chairman. [Laughter]

VICE CHAIRMAN MCDONOUGH. A wee bit more than adequate.

CHAIRMAN GREENSPAN. I hesitate to try to summarize this. I've always wanted to be in the position of the Congress, when they pass an ambiguous law and then just say to others, "You solve it."

MR. REINHART. I would suggest that Dino and I go back and look at the transcript of this discussion [laughter] and solve that problem. One thing that's clear is that Dino will be studying the options associated with acquiring Ginnie Maes and then we'll get back to the Committee to—

CHAIRMAN GREENSPAN. I do think that the issue of limited resources is not a minor question. When we began examining this, there was a 1 in 10 chance that those budget surpluses really would arrive and that we would find ourselves in a very difficult position with regard to SOMA. So we had no choice but to look at the options. The likelihood of surpluses has dissipated, and the rest of the work now is largely discretionary. The question is, Is a particular issue sufficiently worthwhile in the broad aspect of Federal Reserve operations to use the resources? And that's a judgment that I suspect the two of you could make far better than any of us.

VICE CHAIRMAN MCDONOUGH. I think some guidance we might add is that the staff ought to pursue this as they can—not by hiring new people or by working overtime, but they ought to take it seriously. If it takes you six months or twelve months, that's not going to endanger the republic.

MS. MINEHAN. On the Ginnie Maes, you mean?

MR. FERGUSON. Let me make one other point. I agree with what others have said about leaving some of the tough judgments to the staff to make. On the contingency issue, however, we have invested a lot in contingency planning, and I don't think there's any reason to spend another minute on it at this stage. While I would leave it to the staff to figure out how to proceed on the ACF and other issues, I definitely want the CACF—and I think it is the sense of the Committee as well—to be taken off the table.

MR. REINHART. From what I heard, and I hope Dino agrees, the Committee has taken off the table accepting foreign sovereign debt as collateral at this time; and has also taken off the table a contingency ACF. The first order of priority, in terms of staff study, is acquiring Ginnie Maes outright in the portfolio. And you're deferring to our judgment the issue of when resources are available for further study of an ACF. The sequence may very well be that we will come back to the Committee with a document about Ginnie Maes and ask at that time what you would like to hear about an ACF.

MR. KOS. What I would propose then is that at some point over the next few months, at a meeting next year, we come back to the Committee with a proposal for what a Ginnie Mae program would look like. That is, we'd try to give you some concrete sense of the size of the program that we would envision and how we would buy the Ginnie Maes. With the front office there are some accounting issues that we might be able to resolve by then. We would try to

assess the implications in terms of costs so that you have a sense of what it would cost the System or the New York Fed to do this. So the next document would be more concrete than the general approach that we have taken to date when we've been looking at alternative approaches. That would be my suggestion for some time early next year.

MR. SANTOMERO. I agree completely. I would urge you to make sure that the cost issues are indeed on the table. We may find out that the shadow price of our involvement in that market is sufficiently high that we want to look at alternatives. Or we may want to conclude that it's not worth the money. I'm not suggesting you would do that, but if we have that sort of information in front of us rather explicitly, it will give us a better sense of what is really involved.

VICE CHAIRMAN MCDONOUGH. Dino has already been told that he has no room for expanding the budget for this—not two sous more than what he already has in the budget.

CHAIRMAN GREENSPAN. Okay, this terminates the official FOMC meeting.

END OF MEETING