

**Meeting of the Federal Open Market Committee on  
May 9, 2007**

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, May 9, 2007, at 8:30 a.m. Those present were the following:

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Mr. Hoenig  
Mr. Kohn  
Mr. Kroszner  
Ms. Minehan  
Mr. Mishkin  
Mr. Moskow  
Mr. Poole  
Mr. Warsh

Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee

Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

Mr. Reinhart, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Ms. Smith, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Baxter, Deputy General Counsel  
Ms. Johnson, Economist  
Mr. Stockton, Economist

Messrs. Connors, Evans, Kamin, Madigan, Rasche, Slifman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

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

Ms. Liang and Mr. Struckmeyer, Associate Directors, Division of Research and Statistics, Board of Governors

Messrs. Leahy and Wascher, Deputy Associate Directors, Divisions of International Finance and Research and Statistics, respectively, Board of Governors

Mr. Dale, Senior Adviser, Division of Monetary Affairs

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

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

Mr. Carlson, Economist, Division of Monetary Affairs, Board of Governors

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

Ms. Green, First Vice President, Federal Reserve Bank of Richmond

Mr. Rosenblum, Executive Vice President, Federal Reserve Bank of Dallas

Mr. Hakkio, Ms. Perelmuter, Messrs. Rolnick, Rudebusch, Sniderman, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Kansas City, New York, Minneapolis, San Francisco, Cleveland, and Richmond, respectively

Messrs. Dotsey, Tallman, and Tootell, Vice Presidents, Federal Reserve Banks of Philadelphia, Atlanta, and Boston, respectively

**Transcript of the Federal Open Market Committee Meeting of  
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CHAIRMAN BERNANKE. Good morning, everybody. We start with the Desk operations, Bill.

MR. DUDLEY.<sup>1</sup> Thank you, Mr. Chairman. I'll be referring to the handout with the blue on the front. The market turbulence that began in earnest on February 27 is now a distant memory. Risk appetites have recovered, volatility in the fixed income and equity markets has declined, and the U.S. equity market has climbed to a new high. Exhibits 1, 2, and 3 show the correlation matrices for the daily price and yield movements in the fixed income, equity, and currency markets. The blue-shaded boxes indicate correlations with an absolute value greater than 0.5. As shown in exhibit 1, until February 27, the correlations across most of these asset pairs were low. However, beginning on February 27 through mid to late March, correlations rose sharply as risk-reduction efforts dominated financial markets. This shift can be seen in exhibit 2, where all but one of the boxes are shaded blue. Since the March FOMC meeting, calm has returned, with asset-price movements again becoming mostly uncorrelated. The matrix shown in exhibit 3, which shows the correlations since the March FOMC meeting, looks similar to exhibit 1.

As I mentioned in my briefing at the March meeting, although the turmoil in the markets was related mostly to risk-reduction efforts, in certain areas—the subprime mortgage market is the best example—the deterioration in performance was related mostly to fundamental developments. As can be seen in exhibits 4 and 5, which plot delinquencies and losses for the notorious 2006 subprime vintage, the deterioration in performance has continued apace. Exhibit 4 shows that delinquencies of more than sixty days for the 2006 vintage are even higher than those for the 2001 vintage. This is noteworthy because in 2001 the U.S. economy experienced a mild recession and payroll employment was declining. Even more noteworthy is the trend of losses for the 2006 vintage. As shown in exhibit 5, losses for the 2006 vintage are running at about triple the rate of the 2001 vintage. This poor loss experience appears due both to deterioration in underwriting standards and to less-favorable underlying conditions—for example, the softening trend of home prices in many local markets.

The fundamental deterioration in the subprime mortgage sector can also be seen in other measures of performance. For example, exhibit 6 illustrates the behavior of BBB-rated spreads for the ABX, CDS, and cash markets. The ABX represents an index of twenty credit default swaps on twenty BBB-rated asset-backed securities, and the BBB cash index represents the yield spread on the BBB-rated tranches of the asset-backed securities. Thus, the ABX index references, via the credit default swap market, the underlying asset-backed securities market. As can be seen in this exhibit, although all three spreads have recovered somewhat over the past few weeks, spreads

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<sup>1</sup> Material used by Mr. Dudley is appended to this transcript (appendix 1).

remain much wider than earlier in the year. Also, note that ABX spreads remain considerably wider than the CDS and cash spreads that they reference. This situation underscores the illiquidity of the ABX market and may partially reflect the lack of a natural constituency of investors who might wish to take the long side of this index, especially when the subprime market is under stress. The problems in subprime mortgages have spilled over into the collateralized debt obligation (CDO) market. As you may recall, many CDOs have a substantial proportion of their assets in lower-rated subprime asset-backed security tranches. After widening sharply in late February, the yield spreads on mezzanine structured-finance CDOs have shown no recovery. In fact, as shown in exhibit 7, the spreads on these CDOs have continued to widen.

At the last FOMC meeting, I argued that the selloff in the equity market that began in late February had at least one fundamental component—the reduction in earnings expectations for 2007. Yet the equity market has recovered quite strongly. I think that this can be explained by three factors. First, earnings in the first quarter were stronger than expected. The Board staff estimates that first-quarter earnings for the S&P 500 will have increased about 9 percent on a year-over-year basis. Second, perhaps as a result, earnings expectations have stabilized. As shown in exhibit 8, the median bottom-up equity analyst forecast for S&P 500 earnings growth in 2007 has stopped falling and remains above 6 percent. Third, buyout and buyback activity continues unabated. Exhibit 9 shows the flow of funds data on net equity issuance. As can be seen, the outstanding supply of U.S. equities is shrinking rapidly, in contrast to the increase in net supply that occurred over the 2000-04 period. Buyouts and buybacks may also be a factor explaining the recent behavior of corporate credit spreads. As shown in exhibit 10, high-yield and emerging-market debt spreads have mostly recovered since the late February widening. However, investment-grade debt spreads remain wider than in early 2007. Investment-grade debt performance may be lagging because investors fear that the credit quality of this debt will be undermined as buyouts and buybacks result in increased leverage.

Turning now to the currency markets, an emerging story is the weakness of the U.S. dollar. As shown in exhibit 11, the dollar has fallen about 3 percent against the euro since the start of the year and is virtually flat against the yen over this period. The weakness against the euro appears to reflect mostly changing interest rate expectations. Exhibit 12 plots the spread between the June 2008 Eurodollar contract and the euribor contract. As can be seen in this exhibit, the expected interest rate differential has fallen about 40 basis points this year. As this has occurred, the euro has strengthened. To date, the dollar's weakness has not been of much concern to market participants. The decline has been gradual, and investors perceive that global imbalances are unwinding smoothly. Nevertheless, the subprime debacle points to another source of risk for the dollar. In recent years, the net acquisition of dollar-denominated financial assets by foreign investors has shifted to private flows from public flows and to corporate bonds, including asset-backed securities and CDO obligations, from Treasury and agency debt. This shift is shown in exhibit 13. My worry here is that the problems in the subprime and alt-A mortgage market could

ultimately affect foreign investors' appetites for U.S. asset-backed securities and CDOs. For example, a particularly poor performance of lower-rated ABS and CDO tranches, coupled with the widespread corporate rating downgrades that might be associated with such poor performance, could cause foreign investors to lose confidence in investing in dollar-denominated debt.

In terms of U.S. interest rate expectations, investors expect no near-term change in policy. However, market participants continue to expect significant easing late this year and in 2008. Interest rate expectations for the remainder of 2007 are back where they were at the time of the January FOMC meeting. Looking at the federal funds rate futures market in exhibit 14, we can see that only about one 25 basis point rate cut is expected in 2007. In contrast, expectations for 2008 more closely resemble expectations at the time of the December and March FOMC meetings, not the January meeting. As can be seen in exhibit 15, which plots Eurodollar futures contract yields, investors expect substantial monetary policy easing in 2008. Why this delayed pattern of easing? There are three potential explanations. First, as I have noted before, futures market yields reflect the mean, not the modal, forecast. To the extent that investors perceive a moderate risk of significant economic weakness that could lead to pronounced monetary policy easing, then the yields in the futures market could be well below the modal forecasts of investors. Second, some investors may disagree with the FOMC about the outlook. In this case, they might anticipate that it will take time for the FOMC to come around to their way of thinking—leading to rate cuts that occur only later. Third, some investors may anticipate that inflation will moderate. As this happens, the FOMC might gradually reduce its nominal federal funds rate target following lower inflation—essentially keeping the real federal funds rate constant.

Finally, the survey of the primary dealers shows little change in interest rate expectations since the last FOMC meeting. Exhibits 16 and 17 compare dealer expectations with market expectations before the March FOMC meeting and before this meeting. The horizontal bold lines represent market expectations. The blue circles represent the different dealer forecasts, and the size of a circle represents how many dealers have that forecast. The green circles represent the average dealer forecast for each period. The average of the primary dealer forecasts is consistent with only slightly more than 25 basis points of easing through the end of this year—not much different from what is priced into the federal funds futures market. As can be seen, the dispersion of the dealer forecasts over the next few quarters has narrowed a bit. However, considerable disagreement remains about whether short-term rates will be higher or lower a year ahead. Also, the average of the dealer forecasts for 2008 remains considerably above market expectations. This presumably reflects mainly the “downside risks” notion, which should cause the modal forecasts of dealers to be higher than the mean expectations represented by futures prices. I'll be happy to take any questions.

I will need approval for domestic operations; there were no foreign operations. Also, I circulated a memo asking you to vote to approve renewal of the swap lines to Canada and Mexico.

CHAIRMAN BERNANKE. Okay. Questions? President Fisher.

MR. FISHER. I have two questions. On page 2, when you talk about subprime paper, do we have any data that can tell us anything about the stress in the alt-A markets specifically?

MR. DUDLEY. There is definitely some spillover into alt-A, but alt-A delinquencies and losses are a fraction of subprime. If you compare the characteristics of alt-A loans with those of subprime loans, you'll see the same easing of underwriting standards in the alt-A market that occurred in the subprime market and almost identical characteristics of the underwriting standards except for one difference—the FICO score. The FICO score for alt-A is much higher. Apparently, the FICO score is pretty important because the losses for alt-A are a fraction of those on subprimes. But there are data that show some spillover.

MR. FISHER. My second question regards S&P earnings. Is there a way to split out what comes from the rest of the world and what comes from the United States? I know it would be analytically difficult, but I'm just wondering if there is a disparity between the two in what drops to the bottom line.

MR. DUDLEY. I'm sure there is a disparity between the two. I do not know of any way to break that out clearly. One factor—the weakness of the dollar versus the euro—is definitely helping to boost corporate earnings. A disproportionate share of U.S. foreign activity is Europe-oriented, so it's a bigger share than would be suggested by the European share of global GDP. That factor is definitely helping to support our earnings. I have never seen any data on that. We'll look into it to see if there's anything, but I'm not hopeful.

MR. FISHER. Thanks, Bill.

CHAIRMAN BERNANKE. Are there other questions? We need a vote to ratify domestic open operations.

MR. KOHN. So moved.

CHAIRMAN BERNANKE. Passed without objection. We also need a vote on the swap lines.

MS. MINEHAN. So moved.

CHAIRMAN BERNANKE. We've discussed this in the past. The swap lines serve partly a diplomatic function, and they have some relevance to potential financial crises, if they're needed for dollar liquidity either in Canada or in Mexico. However, I will bring these up with Secretary Paulson at some point just to make sure that the Treasury is aware of what we're doing—whether we need to expand them or reduce them. So we've had a motion without objection. Okay, then the swap lines are approved. Let's turn now to the economic situation.

Dave?

MR. STOCKTON. Thank you, Mr. Chairman. In this forecast round, you, as policymakers, were faced with an identification problem similar to that which we, as econometricians, so often confront. Although the Greenbook forecast is essentially the same as it was in March, several observationally equivalent hypotheses could explain this outcome. First, abject laziness on the part of the staff; second, brilliant prescience on our part; or third, what I assume is your working null hypothesis—dumb luck. [Laughter] Well, I can assure you that abject laziness can be ruled out. It took much agonizing, endless meetings, and a lot of hard work to do nothing. We are, after all, still part of the federal government. [Laughter] As for prescience and luck, they did combine to leave the outlook pretty much as it was at the time of the last Greenbook. We still believe that the economy has been growing at a pace less than its potential, held down by the ongoing slump in housing activity. As the drag from residential investment abates, growth of real output is expected to pick up. But that reacceleration of activity is limited by a diminishing impetus to consumer spending from housing wealth and a reasonably restrictive monetary policy.

Let me begin by citing a few areas of the forecast in which developments have unfolded much as we had anticipated. I'll then move on to some of the areas of notable surprise that luckily had offsetting effects on the outlook. First, the BEA's advance estimate of real GDP in the first quarter showed an increase of 1¼ percent

that was close to our forecast both on the total and in the particulars. As expected, the decline in residential investment took a significant bite out of first-quarter growth, as did net exports and defense spending. Outlays for equipment were also quite soft. We view the meager gain in real GDP posted in the first quarter as exaggerating the weakness early this year. In particular, we are anticipating defense spending to bounce back in the second quarter to a level more consistent with appropriations, and we expect net exports to largely reverse their first-quarter drop. As a consequence, we are projecting real GDP to advance at a pace of a bit more than 2½ percent in the second quarter. Smoothing through the temporary ups and downs, we believe that the economy probably has been expanding at a pace of about 2 percent in the first half of this year, the same rate that we had projected in the March Greenbook.

A second major piece of our story that appears to be receiving support from the incoming data is our forecast that consumption growth would slow noticeably. A projected step-down in the growth of consumption is an important reason that in our forecast, even as the housing contraction eventually wanes, growth in real GDP remains below the pace of its potential. Although it is far too early to claim victory, consumer spending on goods has flattened out in recent months after sharp increases at the turn of the year. The shallow trajectory of spending as we move into the second quarter, a lower level of real disposable income, and sluggish chain store sales suggest that our forecast of 2 percent growth of real PCE in the current quarter is within comfortable reach. However, I would like it noted for the record that I am not characterizing this as a “slam dunk.” [Laughter]

A third key element of our story in the last Greenbook was that, even though equipment outlays had weakened over the past few quarters, we did not believe that this weakness was the front edge of a more serious retrenchment in capital spending. In that regard, we received a bit of reassurance from an upturn in the shipments of nondefense capital goods in March and an even larger jump in new orders for these goods. Those data suggest that high-tech investment remains on a solid uptrend, whereas investment outside high tech and transportation seems poised for a modest upturn in the second quarter after sizable declines over the preceding six months. As expected, purchases of heavy trucks remain the area of most notable weakness. Needless to say, the data for investment are so volatile that we remain cautious about concluding that the downside risk to capital spending has abated much. But given our recent track record in this area, you might consider it good news when the staff reports no news.

A fourth element of our story that, at least for now, seems to be panning out is that the inventory overhangs that emerged in the second half of last year would be worked off relatively smoothly, rather than cumulating into something more serious. In the motor vehicle sector, steep production cuts in the second half of last year and early this year, coupled with a moderate pace of sales, have brought days' supply of light vehicles down to comfortable levels. Indeed, the automakers have scheduled some increases in production in the current quarter. Outside motor vehicles, manufacturers appear to have adjusted production reasonably promptly to the

unintended buildup of stocks. Indeed, manufacturing IP excluding motor vehicles declined at an annual rate of 1½ percent in the fourth quarter and increased only a paltry 2 percent in the first quarter. Some book-value measures of inventory-sales ratios remain elevated, but measures of days' supply from our flow-of-goods system have shown an improvement that parallels reports from purchasing managers of fewer inventory problems among their customers. Moreover, factory output increased sharply in March, and the available physical product data and the readings from the labor market report point to another sizable increase in April. So the evidence seems to suggest that the inventory correction is abating. I should note that yesterday's figures on wholesale inventories in March came in below what was assumed by the BEA in the advance estimate of GDP. All else being equal, those data suggest a downward revision in first-quarter real GDP growth of about ¼ percentage point. In response, we'd probably add a similar amount to our second-quarter estimate of real GDP.

Finally, another central element of our forecast has been that labor demand would slow in lagged response to the downshift in the growth of overall activity. We have been counseling patience in the face of data in this area that persistently surprised us to the upside. Last week's labor market report provides at least a shred of evidence in support of our story. Private payrolls increased 63,000 in April, and there was a downward revision of 24,000 in February—leaving the level of employment below that incorporated in the May Greenbook. Gains in private payrolls have averaged about 90,000 per month over the past three months, and we expect that pace to be maintained over the remainder of the quarter. The unemployment rate increased to 4.5 percent last month, also in line with our projection.

Putting these pieces together, we are feeling a bit more confident of our story that activity is increasing at a subpar 2 percent pace in the first half of the year. We are also a bit less worried about the upside risks posed by labor demand and consumption and about the downside risks posed by investment spending and inventories—but just a bit less worried.

Our longer-term outlook has changed little as well. We have revised down our forecast for the growth of real GDP this year by 0.1 percentage point, to 2 percent, and revised up our forecast for 2008 by a similar amount, to 2.4 percent. I would like to argue that these very small adjustments are a testament to our prescience, but I'll have to admit that we seem to have benefited more from dumb luck. In brief, the negative consequences of a weaker outlook for housing activity and higher projected oil prices were just about offset by the positive effects of higher equity prices and a lower foreign exchange value of the dollar.

Turning first to the housing market, the surprise has not been in actual construction activity, where starts have exceeded our expectations a bit. Rather, the real news has been on home sales—in particular, the sales of new homes. Not only did new-home sales drop in March to a level below our expectations, sales were revised down in the preceding months as well. As a consequence, the months' supply

of unsold new homes has moved up sharply further in recent months instead of tipping down as we had earlier expected. Moreover, sales cancellations, which had appeared to be heading down, turned back up in March. Some of this further weakening may reflect the continuing fallout from the pullback in subprime lending. But we also think that housing demand more generally has continued to soften. With sales now projected to flatten out at a lower level than we had previously thought and with the months' supply of unsold homes at a higher level, we anticipate that the production adjustment will be deeper and longer than was incorporated in our March forecast. Moreover, these developments also led us to trim a bit from our house-price forecast. Another source of downward revision in our outlook for real activity was a \$6 per barrel increase in the price of imported oil over the intermeeting period. As Karen will discuss shortly, oil prices have backed off some since the completion of the Greenbook, but they are still running above our March forecast. The effect of higher crude prices has been amplified by a jump in gasoline margins. Those margins have soared as both planned and unplanned refinery outages have resulted in a substantial drop in gasoline inventories. All else being equal, higher consumer energy prices will likely put a noticeable dent in household incomes and consumer spending in coming months.

Of course, not all else has been equal. Stock prices are about 7 percent above the March Greenbook assumption, and in our forecast, the associated higher level of household net worth provides greater support to consumer spending and largely offsets the effects of lower real incomes. Another positive offset to weaker housing and higher oil prices is the lower projected path for the dollar. The dollar dropped about 2 percent over the intermeeting period and is expected to remain below our previous projection by about that amount. A lower dollar and the accompanying higher prices for imports provide added impetus to domestic production as foreign and domestic demands are shifted toward domestic producers. With near-term developments unfolding about as we had expected and our longer-term projection benefiting from some powerful crosscurrents, we continue to present you with a reasonably benign outlook. Growth slows but doesn't falter as actual output moves into alignment with potential.

In contrast to our forecast of real activity, we have made some notable changes to our projection of overall price inflation in the near term. In particular, the recent run-up in gasoline prices is leaving a clear imprint on headline inflation. A steep jump in consumer energy prices is projected to boost overall PCE price inflation, which ran at a  $3\frac{1}{4}$  percent pace in the first quarter, to a rate of  $4\frac{1}{4}$  percent in the current quarter—an upward revision of  $1\frac{1}{2}$  percentage points from our March forecast. Meanwhile, core inflation has, on net, come in right in line with our expectations. The core measure for February was 0.1 percentage point higher than we had expected and for March was 0.1 percentage point lower. For the first quarter as a whole, core PCE prices increased at a pace of  $2\frac{1}{4}$  percent, the same pace that we had projected in the last Greenbook. We are anticipating a similar-sized increase in the current quarter.

Looking ahead, I guess our luck with offsetting errors ran out when it came to the inflation forecast. We accumulated a number of small changes in the key determinants of our inflation projection, and for the most part, they pointed in the same direction. Higher energy costs, higher import prices, a bit tighter labor and product markets, and a slightly lower estimate of the growth of structural productivity suggest somewhat greater upward pressure on price inflation. Each of these influences was small, but taken together, they caused us to revise up our forecast for core PCE inflation by 0.1 percent in both 2007 and 2008. Despite these revisions, we continue to expect core price inflation to edge down next year, from 2.3 percent this year to 2.1 percent next year, as the effects of higher energy and import prices wane, as resource utilization eases a bit, and as inflation expectations hold roughly steady. Karen will continue our presentation.

MS. JOHNSON. The basic message from the rest of the global economy is that economic conditions are favorable and appear likely to remain so through the end of next year. Although small variations in the basically optimistic outlook are present, real GDP growth in the foreign economies seems poised to continue at an average annual rate of about 3½ percent throughout the forecast period. Inflation risks are present as slack has been reduced in several foreign economies. However, we anticipate that central banks abroad will respond further as needed such that inflation abroad will edge up only slightly through the end of 2008. In this forecast round, the staff had to contend with a move back up in global crude oil prices and further increases in nonfuel commodities prices—shocks common to the whole global economy. In addition, for the U.S. outlook, we needed to take account of the depreciation of approximately 2 percent in the foreign exchange value of the dollar over the intermeeting period, as Dave discussed.

We have recently revisited the question of whether we could improve upon the forecast for crude oil prices embedded in market futures prices and have convinced ourselves based on empirical evidence that we cannot. As a result, our projections for future WTI spot oil prices and the average oil import price are shifted up and down over time by fluctuations in spot and futures oil prices. This has been an “up” forecast round. After reaching a peak around August of last year, global oil prices fell through very early this year and then reversed to trend back up, but not smoothly. The upward move of oil prices over the intermeeting period was apparently a response to the surprising degree of continued production restraint from OPEC and heightened concerns about supply from Iran, Iraq, and Nigeria. The strength in global demand for energy, too, no doubt provided support for continued elevated prices. In this forecast we also had to take into account a deviation in the usual price spread between West Texas intermediate and other grades of oil. Reduced refinery activity has led to an unusually large accumulation of crude oil stocks in the Midwest, the delivery area for WTI, and depressed its price relative to that for other grades.

When we were finalizing the baseline forecast, spot and futures prices implied an increase to our projection for WTI crude oil in the current quarter of about \$4.50 per barrel relative to the projection in the March Greenbook; however, this change

understates a bit the upward shift in overall oil prices because of the change in spreads. These considerations led us to revise upward the average oil import price in the Greenbook for the current quarter about \$6.50 per barrel. We expect that over the forecast period the relative prices of WTI and other grades will gradually move back toward normal, so our upward revision narrows somewhat in future quarters, particularly by the second half of 2008. The baseline forecast reflects the consequences of these higher oil prices for the U.S. economy and the rest of the world. Turning points in the ups and downs of oil prices have an uncanny way of happening at the time that we are finishing the Greenbooks, and such a turning point might have happened again. Since the Greenbook path was set, crude oil prices have moved back noticeably. If we were concluding our forecast today based on yesterday's futures prices, we would show an upward revision in the near term of only about half that in the Greenbook. For 2008, our upward shift would be about two-thirds of that in the Greenbook. The effects of this more benign level for oil prices would be slightly positive for real GDP growth both in the United States and abroad. Such a lower projected path for oil prices would also slightly lessen the pressures on headline inflation rates that are a feature of the baseline forecast.

Another element in the forecast worth a brief mention is the upward revision to both core import price inflation and core export price inflation for the second quarter, to annual rates of 4.5 percent and 5.5 percent, respectively. Prices for core imports and core exports accelerated in the first quarter as prices for food and industrial supplies, particularly fuels and metals, surged. Metals prices have continued to rise in recent weeks, and the increase, along with the recent depreciation of the dollar, led us to revise up our current-quarter projections. In constructing our forecast for these trade prices, we base our projection of the commodity-price component on market futures prices. Again, we have done recent work to see if a better alternative is available, but we have concluded that none is. Despite rapid increases in prices of various traded commodities over the past few years, the futures markets are implying a path through the end of 2008 that is about flat for an index of nonfuel commodities. In combination with our projection for only modest real dollar depreciation and no major changes in overall inflation rates here and abroad, such an outlook for commodity prices yields a deceleration in both core import prices and core export prices. Our forecast for the increase in these prices in 2008 remains low, at 1.3 percent.

Although oil prices have been revised up this time, their projected path flattens in mid-2007. This outlook and the flat projected paths for commodity prices and the dollar imply a waning of the upward push to consumer prices that has resulted from rising oil and commodity prices. Consequently, in the Greenbook forecast, only limited further tightening by some foreign central banks is required to contain inflation. That events in these markets may surprise futures traders and us for yet another year with additional commodity-price increases is a major risk to our outlook for inflation. David and I will be happy to take any questions.

CHAIRMAN BERNANKE. Thank you. Are there questions? President Moskow.

MR. MOSKOW. Dave, you talked about the slowdown in structural productivity in your report. You have marked down your estimates for structural multifactor productivity for the second half of this decade from what you had before. Even before that you had a decline from the first half of the decade to the second half. So I wonder if you could expand a bit on those comments.

MR. STOCKTON. Certainly. As we have reported at recent meetings, we have been surprised by the extent to which actual productivity has slowed over the past six to eight months. We had been resisting a downward revision in our estimate of structural productivity on the expectation that we would imminently see a significant weakening in labor demand that would, in essence, suggest that more of the slowing was cyclical than appeared to be the case. But the tension just seemed to be growing greater over time. As I think Bill Wascher reported in his chart show back in January, our Kalman filter models have been suggesting a more substantial downward revision to structural productivity than we made even in this forecast. Some tension there remains, so we thought we needed to get a little better balance. At the same time, we have been surprised on the upside by the strength in labor force participation—in particular, the participation of workers 55 years old and older. So it felt as though we needed to make some minor adjustments here to get a little better balance of risk for both our labor force forecast and our productivity forecast.

Now, in August, when we get the annual revisions, we're going to have a better idea of how much of the tension between the income side and the product side over the past year gets resolved in favor of the income side. In that case, maybe we have overreacted by making an adjustment, but it just felt at this point as though the shortfall of productivity relative to our structural productivity was so much greater than we could explain by normal cyclical behavior

that we had to give at least a nod in the direction that maybe this was telling us something about slightly weaker structural productivity. I really wanted to wait until we received those figures in August, but it just seemed as though enough evidence against our forecast had accumulated that we needed at least, as I said, to nod in that direction.

MR. MOSKOW. Some work has been done on trying to isolate whether these changes are in the high-tech area or in areas across the economy in which people are not getting as much improvement in the use of new high technology as they did in the past. Can you shed any light on that question?

MR. STOCKTON. I'll let Bill jump in, if he has any particular observations on that. I don't think technology alone explains the surprise that we've had in the past year or so on productivity—I don't know of any work that we or others have done that would allow us to parse out how much of that surprise might have been related to this high-tech issue. The bigger sectoral question in our minds has been related to the behavior of construction employment—a decidedly non-high-tech area—where we have not seen the falloff that one might have thought would follow from the decline in residential investment. Now it turns out that the work we've been doing, partly at the direction of the Chairman, suggests that, although it's a little hard to understand, the construction industry appears to exhibit more labor hoarding than you would think. The real surprise has been that since the turn of the year construction employment hasn't fallen off more than it has. But one could look back and say that maybe some of the weakness in actual productivity reflects a bigger cyclical effect coming from that element. Again, if one put a heavy weight on that, one might be less inclined to revise down one's estimate of structural productivity.

CHAIRMAN BERNANKE. Okay. President Poole.

MR. POOLE. Thank you, Mr. Chairman. In commenting on President Moskow's question you mentioned the disconnect between employment and GDP, particularly in the construction area. Somehow the lag argument doesn't ring very true to me on that one, given that residential construction has been down for such a long time and I think a lot of the smaller companies are hard pressed and probably some of them are going into bankruptcy. So could you elaborate on that aspect of the employment puzzle here?

MR. STOCKTON. I will just raise the white flag. [Laughter] If you thought about an area in which there would be fewer costs to shedding and acquiring labor, construction would probably be right at the top of your list. But the empirical evidence suggests otherwise. Again, this is something we have just started working on, so I don't necessarily want to buy into it 100 percent. But that effect appears to be in the data, and that's all I can say. I had exactly your reaction when I first saw these results. How can that be? Some of it—though we don't think a major part—could be measurement. That is, there may have been more adjustment on that labor margin that isn't getting picked up in the establishment survey. Part of it could be that some of those firms that have been, for example, doing residential investment are shifting to nonresidential investment; but we run the regressions on total construction, and in total construction employment we still find the same puzzling results.

MR. POOLE. Is the GDP number on residential construction put together primarily as a distributed lag off starts?

MR. STOCKTON. There are several major components. Indeed, one—the residential construction component—is based on a lag off starts, both a relatively short lag off single-family starts and a longer lag off multifamily starts. Another significant component is additions and alterations, which is based on survey information. This component is not very well measured; it

is subject to substantial revision. Conceivably, once more-complete counts have occurred, we may find out that perhaps some adjustment was going on there, maybe a bigger increase, and therefore more of that employment was in fact occurring in adds and alts than we currently recognize. That is a significant chunk of overall residential investment.

CHAIRMAN BERNANKE. President Moskow, a two-handed intervention.

MR. MOSKOW. I have just a footnote. A large group of people working this industry are self-employed. I do not know to what extent you could separate that out; but it, too, is an important piece of this puzzle.

MR. STOCKTON. Yes, that certainly could be a factor as well.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. One of the surprises noted in the Greenbook, Dave, was ECI and compensation in the first quarter—the increases were not as large as you had anticipated. I know that those numbers bounce around a lot quarter to quarter, but my impression has been that overall they have been coming in somewhat lower than anticipated for a while, especially given your estimate of the NAIRU. I do not know whether I have that right; but if I do, what do you think is going on there?

MR. STOCKTON. Let me answer the first-quarter surprise and then the longer-term surprise that you are pointing to. We were, indeed, very surprised by the small increase in ECI hourly compensation in the first quarter. But almost all of that surprise occurred in one component—a huge drop in contributions to pension plans. We have checked with folks in that particular area, and it looks as though that estimated decline in construction probably reflected something that happened in the real world. That is, the combination of the fact that corporations had previously raised their contributions to high levels and the improvement in financial markets,

both the stock market and the real estate market in preceding years, suggests that those plans were in better financial shape. There was a decline of 30 percent at an annual rate in that particular component. We do not see that decline as necessarily ongoing or that reduction in payments as an indication of a lower marginal cost of production, so we are not taking a big price signal from that component of labor compensation.

Now that is our excuse for the first quarter. Looking back over a slightly longer haul, compensation per hour has been running below our models, and that could be suggesting a little more slack in labor markets than we are writing down. We have not adjusted our measures of slack partly because the surprises on the price side have not been anywhere near as large as those on wages; they have been, if anything, quite small and not necessarily suggesting that this economy has a lot more room. But the compensation data taken alone suggest less tightness in the overall economy than the product markets would.

CHAIRMAN BERNANKE. We have an intervention from President Minehan.

MS. MINEHAN. Not an intervention. A question.

CHAIRMAN BERNANKE. Oh, I'm sorry. Let me go then to President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. I just want to follow up a bit on the tail end of the conversation with President Poole about residential investment. One of the big changes in your forecast was the additional markdown of pushing the recovery in residential investment out further and sustaining a more negative effect on your forecast. My sense is that had a fairly significant impact going forward. I am curious as to what extent that outcome was really model driven in that your actual estimation of the fundamentals changed, or was it more judgmental? If it resulted from the fundamentals that were predicted by the model, what were the pieces of evidence that were

driving that change, or was it just a judgmental thing that is saying it will take longer? Can you elaborate a little on where that came from?

MR. STOCKTON. It came principally from the fact that we have been gauging our construction forecast from an expectation that builders would try to adjust production to reduce the months' supply of unsold homes down toward a more normal level over the next couple of years. Between the March forecast and this forecast we were surprised (1) by the weakness in the level of home sales and (2) by the very substantial further increase in the months' supply of unsold homes. So to get the inventory of unsold homes back into a more normal relationship—and even then we are not getting back to where we were in the March forecast in terms of months' supply of unsold homes—we saw a bigger production adjustment as being necessary. Now, the awkwardness in relation to your question about the fundamentals is that we actually think that the overhang of unsold homes is a fundamental, even though it is not really in our models of residential construction. Those models do not have a special component for the inventory of unsold homes, in part because that factor is much more episodic than it is a normal sort of right-hand-side variable. So we do view it as fundamental. We think that what we learned was that a bigger problem is out there, a bigger overhang, and we are having it work off. Therefore, it takes longer to work that off with deeper production cuts.

MR. PLOSSER. Is the overhang measured as the absolute number of unsold homes or the ratio of unsold homes to current monthly sales?

MR. STOCKTON. Well, you could do it either way. We did not take, for example, the last month's incredible weakness in new-home sales at face value. We take a six-month moving average, calculate what we think the months' supply is based on that, and have months' supply come back to a more normal level over time. So it is like an inventory-sales ratio. The production

adjustments that we have incorporated in this forecast basically bring that inventory-sales ratio most of the way back toward normal by the end of 2008, but not all the way.

MR. PLOSSER. Then what drives the demand for new homes? If it is an inventory-sales ratio, you were also making some implicit statement about the forecast of demand.

MR. STOCKTON. Absolutely. We have a very mild upturn in home sales as overall activity and income recover from this soft period, but we do not get the normal kind of pop in housing. What is unusual, in part, about this cycle is that, in past cycles, monetary policy was partly responsible for driving the decline of demand and then a much easier monetary policy drove a more significant upturn in sales, and that was an important element in bringing about balance. You had part of the adjustment coming from lower production and part of it being driven by much faster increases in demand as interest rates fell. In our forecast, mortgage rates are drifting up a little from here, so we do not really see the conditions that will generate a substantial turnaround in sales that might work off this margin of unsold homes more through the demand side. But obviously that could still happen.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. This works as an intervention as well as a question because it is exactly along the lines of President Plosser's questions. First, the assumption about inventory and where is normal—the past ten years through the housing boom have created a normality, if you will, of very low inventories, as compared with the longer-run inventories. So the question is, Where is normal, and where do builders want normal to be? How much do they have to do to get back to the level where they were for the past ten years versus the level that you could figure over a twenty-year or thirty-year period? I talked to a group of builders about this a couple of months ago and did not get a whole lot of feedback from them on where they thought they might like to be, although all of

them, I am sure, are making that calculation for themselves in one way or another in their business on a day-to-day basis. But I think it is hard to say that any given level of inventory—seeing how much it changed between the past ten years and the ten or twenty before that—is “normal” with any confidence. Second, I have been taking a bit of confidence, and maybe this is wrong, from the fact that, if you smooth through sales of existing homes, which of course are a much bigger volume than sales of new homes, on a three-month or a six-month moving average, you do see a dip at the beginning of this year and then you see it come back a little in the environment of reasonably low interest rates for prime borrowers and decent interest in terms of mortgage originations and so forth, but obviously not as high as it was. I am thinking that that maybe says something about the demand side, but maybe this is just cockeyed optimism on my part.

MR. STOCKTON. I certainly would not say that. [Laughter] I am glad to hear that the builders you talked to are not giving clear answers to that question because we have been talking to them as well and have not received clear answers. I think this is an open and unresolved question of the forecast. We are predicated our forecast or gauging it basically on an expectation that, in fact, builders would try to drive months’ supply back close to where it was on average over the past ten years, as if that had persisted long enough to reflect their desired equilibrium. But that is a big “if,” and as you note, if one wanted to take a twenty-year or thirty-year average, that desired months’ supply figure would be higher. So an upside risk to housing would be that there is not as big an overhang to be worked off as we are currently gauging in this forecast.

On the sales of existing homes, I guess we, too, have taken some comfort from the fact that they stabilized a bit. More recently there was a dropback in existing-home sales and a decline in the index of pending home sales, which has some predictive content for existing homes going forward. So the picture is a little murkier, but I do think those data might suggest that, although it looks like a

complete free fall in new-home sales, you need to factor in the possibility that overall housing demand is not quite as weak as those figures for new-home sales.

MS. MINEHAN. Anecdotally, we were getting some feedback—in New England anyway—that things are starting to heat up. That's only in relative terms, on the high-end side anyway. But who knows?

CHAIRMAN BERNANKE. Are there other questions? We had, as you know, a trial run in which participants submitted some projections. In the interest of illuminating the conversation that we will have in a moment, I thought I'd ask Vincent just to say a few words about those projections.

MR. REINHART.<sup>2</sup> Yesterday afternoon, we posted to the secure document server a summary of the economic projections that you submitted. The material should be in front of you with a cover memo from Debbie Danker. I will use the table directly behind that cover to review briefly the key features of those projections, and then I will outline the schedule for the trial run going forward.

As shown in table 1, the central tendency of the projections suggests that most of you anticipate that GDP growth will be somewhat soft this year but will pick up a bit over 2008 and 2009. Participants generally anticipate that core PCE inflation will edge a little lower over the forecast period and that the unemployment rate will inch up to the vicinity of 4½ percent. The federal funds rate path associated with this projection for the economy (not shown) is fairly flat over this year and next and moves slightly lower in 2009.

The width of the 70 percent confidence bands for economic variables suggests a wide range of outcomes for growth, inflation, and the unemployment rate over the forecast period. As noted by the memo lines, the central tendency forecasts prepared for the May meeting, relative to the forecast prepared for the January FOMC meeting, indicate a somewhat weaker path for economic growth in the near term and a somewhat higher trajectory for the unemployment rate. The central tendency for core PCE inflation has changed little.

In your accompanying description of the key forces shaping the economic outlook, most of you cited continued weakness in the housing sector—with residential construction viewed as likely to remain a drag on growth for some time and the softness in home prices noted as a factor damping the rise in wealth and consumer spending. Against this backdrop, GDP growth was expected to remain somewhat below trend for a while, resulting in a small rise in the unemployment rate. It was also noted that labor hoarding in some industries over recent months had likely

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<sup>2</sup> Material used here by Mr. Reinhart is appended to this transcript (appendix 2).

masked an underlying easing in labor market conditions that would become more apparent over the remainder of this year. Generally accommodative financial conditions and solid growth abroad were seen as supporting GDP growth. While most participants looked for core PCE inflation to edge lower, some related that the rise in energy prices and import prices, coupled with recent sluggish productivity readings, would put upward pressure on prices over the near term.

As a group, you tended to be a bit more optimistic about the prospects for aggregate supply than the staff. Several participants noted that their forecasts were premised on a higher rate of potential output growth than projected in the Greenbook, owing in part to assessments (relative to the staff outlook) that labor force participation rates would not decline as much or that structural productivity growth would be stronger. Some participants also pointed out that their forecasts incorporated a lower NAIRU than did the staff outlook.

As for the process from here on, if you would like to change your forecast in light of the discussion at this meeting or data received since you prepared your projection, we ask that you submit your revision to the Secretariat by the opening of business tomorrow. The staff will draft a minutes-style narrative description of the economic projections. This will be a standalone document that will circulate with the draft minutes on the regular schedule. That means you will see a first draft on May 17, a second one on May 22, and a final version on May 24. We ask that you comment on these drafts as if the final version were to be published—but it won't be, nor will you be asked to vote on the document.

CHAIRMAN BERNANKE. Thank you, Vincent. I have penciled in some time after the policy decision for discussion and comments about the process and for the head of the subcommittee to talk a little about what we will be doing in our communication discussions going forward. So in the interest of time, I would ask people who have questions for Vincent to try to restrict them primarily to the projections themselves and to the economic outlook, if that is okay. Does anyone have any questions for Vincent? If not, we can begin our go-round. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. My assessment of the economic outlook and the risks to it is largely unchanged since our last meeting. The data since that meeting have been mixed. On the one hand, the very sluggish real GDP growth in the first quarter gives me pause concerning potential downside risks. Much of the first-quarter weakness, of course, was due to housing, and I really don't see that sector starting to turn around at this point. My homebuilder and banking

contacts report stricter underwriting standards for all mortgages, not just subprime ones, so residential investment could remain a significant drag on the economy over the near term as the Greenbook now envisions. Indeed, whereas the Greenbook assumes that national house prices are flat going forward, I am worried that they may actually fall. On the other hand, the improved picture of auto inventories along with some positive glimmers on manufacturing and business investment suggests that those sectors may prove to be less of a drag on the economy going forward. With respect to inflation, the recent news has also been somewhat mixed with lower-than-expected readings on core consumer prices and labor compensation offset by higher prices for energy, other commodities, and imports.

Taking a longer view, I anticipate real GDP growth over the next two and a half years of about 2.6 percent, just a bit below my assessment of potential. My forecasts of both actual and potential growth are a tenth or two stronger than the Greenbook forecasts; but the basic story is very similar, and the underlying assumptions, including the path for the nominal funds rate, are essentially the same. I view the stance of monetary policy as remaining somewhat restrictive throughout the entire forecast period. The key factors shaping the longer-term outlook include continued fallout from the housing sector, with housing wealth projected to be roughly flat through 2008. Given the reduced impetus from housing wealth, household spending should advance at a more moderate pace going forward than over the past few years.

This slowdown in consumption is reinforced by more-moderate gains in personal income, as the unemployment rate gradually rises, reaching 5 percent in 2009. Although I anticipate that the labor market will remain fairly tight over the next year, I do not expect faster compensation growth to exert significant upward pressure on prices. I expect it instead to restrain profits, given that labor's share of income is now at an exceptionally low level. I also anticipate that various

temporary factors that have been boosting inflation, such as the run-up in owners' equivalent rent and the pass-through of energy prices, should dissipate, while inflation expectations remain well anchored. Overall, I'm more optimistic regarding inflation than the Greenbook and anticipate that core PCE price inflation will edge down below 2 percent after next year.

One of the more interesting questions about the outlook, as David noted in the questions to him, is how to reconcile the strong labor market performance with the weak growth in output or, equivalently, how much of the recent slowdown in productivity growth is likely to persist. And that is something that we have been thinking about, too. Over the four quarters of 2006, nonfarm business productivity rose 1.6 percent, about half as fast as the average pace set from 2000 through 2005. Whether these recent lower numbers reflect a transitory drop in growth or a downshift in the trend rate is an important issue. A lot of excellent research has been done on this topic by staff at the Board and elsewhere in the System. My reading of the evidence at this point is that the recent decline in productivity growth does largely reflect cyclical factors. I think productivity growth has fallen significantly below trend because of labor hoarding and lags in the adjustment of employment to output.

We have also been giving close scrutiny to the behavior of the residential construction sector and productivity in that sector. My staff has done some work on estimating what productivity growth has been over the past year or so in residential investment and in the nonfarm business sector outside residential investment. They estimate that essentially all of last year's slowdown in labor productivity growth is due to the behavior of productivity in residential construction. We estimate that residential construction productivity dropped 10 to 15 percent in 2006, whereas productivity in the nonfarm business sector outside residential investment was well maintained. Exactly why those lags exist, again, is a mystery to me as well as to David and others.

But going forward, it seems to us that, as the adjustment lags work themselves out, residential construction employment will likely post significant declines, and productivity in that sector and the economy as a whole will rebound. That said, the pace of structural productivity growth may also have declined slightly as the Greenbook hypothesizes. Relative to the second half of the 1990s, both the pace of productivity growth in the IT sector and the pace of investment in equipment and software have slowed, and these factors have probably depressed trend productivity growth slightly in recent years and are likely to continue depressing it somewhat going forward.

But the hypothesis that the recent decline in productivity growth is mainly structural does not seem to me to square well with the broad range of available evidence. Recall that in the 1990s there was a whole constellation of evidence—including a booming stock market, robust consumption, and rapid business investment—that was consistent with a hypothesis of a lasting increase in the rate of productivity growth. In contrast, over the past year or so, business investment in equipment has been very sluggish and more so than seems warranted by the deceleration in business output. So such weakness could reflect lower assessments by companies of their ability to improve productivity through the installation of new capital, and that is, I think, consistent with the lower trend of productivity growth. But you would think that a marked slowdown in secular productivity growth would also result in downward revisions to the expected paths of future profits and real wages, weakening equity market valuations and crimping consumption growth. I have seen no signs over the past year that household perceptions of their future wealth accumulation have been downgraded.

In sum, the data seem consistent with the view that the recent slowdown in nonfarm business productivity represents a temporary cyclical drop that is concentrated in residential

construction combined with a modest decline in the trend. So I remain optimistic that the underlying productivity trend is at or only slightly below 2½ percent.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Conditions in the Seventh District have improved modestly since my last report. The overall pace of business activity is still rather restrained, but we have seen some pickup in our manufacturing sector. The key issues regarding the national outlook are the same as the ones the last time we met. How will the residential investment puzzle settle out, and can we explain this puzzling weakness in business fixed investment?

Based on the data that we've received since March and my contact calls this round, I've become somewhat more optimistic about investment and somewhat more pessimistic about housing. At the same time, higher gasoline prices have the potential to weigh on consumer spending. So on balance our growth projection for '07 and '08 is a bit lower than it was in March. We now think that growth will average moderately short of potential over the remainder of '07 and then run close to potential in 2008. However, our GDP numbers are a bit higher than the Greenbook's, reflecting both a smaller shortfall from potential this year and a somewhat higher assumption about the rate of potential output growth.

Indeed, there has been some good news regarding the near-term outlook. First, the international outlook continues to improve. Many of our contacts noted exceptionally strong demand from abroad, particularly for capital goods. Second, although we've been actively looking for spillovers from the problems with subprime mortgages, we have not yet seen major effects on pricing or the supply of credit in other markets. That is not to say that we have not heard of any effects. One of our directors, the CFO of a major national homebuilder, noted that tighter underwriting standards are reducing housing demand somewhat outside the subprime sector.

Consumers still appear to have ample access to financing. For example, the head of GM noted that banks were making more auto loans with six- or seven-year maturities in order to lower monthly payments for liquidity-strapped consumers.

Finally, as I noted earlier, we feel a bit more confident in our assumption that the weakness in BFI will turn out to be relatively transitory. I don't want to make too much out of one month's noisy data, but the latest readings on capital good orders and the PMI (purchasing managers' index) were encouraging, and most of the comments from my business contacts have been positive in this regard. The impression I have from these discussions is that the pause in investment spending is showing early signs of ending; but this is very early, and we clearly need to keep monitoring developments carefully.

Beyond the near-term cyclical developments, the changes in structural productivity in the Greenbook highlight an important source of risk to the longer-run outlook for sustainable non-inflationary growth, as Janet just discussed. There is a lot of uncertainty about the components of structural productivity. In our view, we haven't seen enough evidence yet to mark down structural productivity as much as the Greenbook has. Consequently, our estimate of potential output growth is a bit higher than that of the Greenbook.

With regard to inflation, the incoming information has caused the forecasts from our indicator models to come down a bit. They now project that core PCE prices will rise  $2\frac{1}{4}$  percent this year and 2.1 percent in '08. But we do not see any progress beyond that. If we carry our models out to '09, they have inflation staying at 2.1 percent, higher than my preferred range. Furthermore, I see some upside risks to this forecast. Neither our GDP projection nor the Greenbook's generates any meaningful resource slack over the projection period, and then there are the higher costs for energy and other commodities and increases in import prices. So we will be

relying heavily on stable expectations to keep inflation in check. I believe we are currently achieving some implicit tightening of policy by keeping rates on hold during this period of sluggish activity, but this restraint will wane if the real economy returns to potential by early next year as we expect. So I continue to think that the risks to price stability dominate the risks to sustainable growth.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, last time I reported a sense that the international economy was hot, that our domestic economy was cold, and that the regional economy of the Eleventh District was just about right. I concluded my comments by saying that we were in treacherous waters in terms of the U.S. economy, navigating between the Scylla of inflation and the Charybdis of a slowdown in growth. Like President Yellen, I don't have much change to report, but I do want to comment in very brief order on a couple of aspects that my two predecessors commented on.

As far as the international economy is concerned, we see continued expectations for higher growth and a different mindset beginning to set in. You saw that, I believe, in the French elections. Even Italian consumer and business confidence is at a ten-year high, or six-year high depending on which measurement you use. You also see it reflected in various measures of port congestion, charter rates for ships, and profit contributions to U.S. multinationals. By the way, the contacts that we talk to, Bill, are making a real effort to ferret it out and have a sense that there should be more push or oomph from abroad than they are getting domestically. You still have to prune those reports carefully. You see it in commodity prices. The bottom line from the standpoint of the Dallas Fed is that we're seeing a tightening of capacity utilization in the rest of the world, which is somewhat vexing for U.S. operators because it limits our firms' abilities to cut costs by shipping production abroad. Nonetheless, the rest of the world economy remains hot.

I have just a couple of comments about the United States. When I talk to the rails, the airlines, the express delivery logistic companies, the middle-income consumption sectors such as retailers, or those that sell into those sectors, I am hearing increasing reports of weaker demand and lower expectations than I was hearing at the last meeting in all but one sector, which is the entertainment sector. Advertising revenues for the networks continue to stay high, and by the way, visits to theme parks are at a record high, driven largely by wealthy foreigners who are finding them to be a tremendous bargain. On the housing front, I have been bearish—more bearish than anybody at this table. I remain so, and like President Yellen and, I believe, President Moskow, I am more concerned than I was before. We can go through the numbers, but I think it is best expressed by the CEO of one of the five big builders, who said that in March he was arguing internally with his board that the headlines were worse than reality and now reality is worse than the headlines. There is significant inventory, and the qualification of buyers is becoming a very vexing issue. I suspect that this situation has yet to run its course. I am also hearing continued reports, despite layoffs and a slowing economy, of continued tightness of highly skilled labor and continued price pressure on that front. Finally in terms of the domestic economy, we are benefiting from a weaker dollar in terms of tourism flows and also the high-end retailers, most of which are in President Geithner's District and one—Neiman Marcus—in my own District. Other than that, I have nothing to add on the U.S. economy.

I want to talk about inflation for a minute. The data—whether core PCE or overall, core CPI, or even the trimmed mean, which we focus on in Dallas—seem to be indicating a tempering of pressures. So we have some meat on the bones of our expectation, or I should say our hope, that some deceleration of inflation pressures would manifest itself. But in talking to my business contacts, I would say—if you will forgive a terrible reversal of biblical scripture—that, though the

flesh may be willing, the spirit is weak. What I mean is that even though they would like to believe the numbers, in terms of their own behavioral patterns and the way they are positioning their management, they feel enormous threats to their margins coming from slow volume growth and coming from increasing cost pressures in that they allocate tasks globally. And their first reaction is to see how they could change the pricing structure domestically. Chemicals are reporting that a 3 to 5 percent price action that was taken at the beginning of the year is sticking. My contact from a large producer of food products said that they are shifting their overall model away from focusing on unit-volume expansion to pricing, and even a ubiquitous brand like Starbucks is moving away from the number of transactions to figure out how to price more aggressively or to restructure the size of their containers, as are many food product producers. The large consumer paper products reported that they were budgeting zero percent price inflation at the beginning of the year and have redone their budget to price at 3 to 4 percent. If I had to pick a word, Mr. Chairman, in terms of the mood of our companies regarding the U.S. economy, I would say that it's somewhat dyspeptic. It's not a very pleasant mood. They feel a little indigestion because of the margin pressure that they're getting and limited relief in terms of what they're able to pull out in volume expansion.

I am in an unusual position of coming from what I believe, reading the Beige Book and looking at the data, is a District that continues to significantly outperform the rest of the economy, although we have slowed somewhat; yet when you look at the histograms, I have the lowest forecast for GDP for this year. So I am the most pessimistic at the table in terms of short-term economic growth, and on the inflation front I would just resort to a Ronald Reaganism, which is that we need to trust but verify. In short, I would not be surprised to see disappointing growth in the second quarter, much more disappointing than in the Greenbook's forecast, nor would I be surprised to see

higher core PCE inflation sustaining itself than I am hearing from some of my colleagues and from the staff. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. The anecdotal reports that I have accumulated since we last met are almost—I guess I should eliminate “almost”—are unambiguously on the soft side. I emphasize “soft,” which I think is a better word than “weak,” except perhaps with my trucking industry contact, who says that volume in both March and April is down 6 percent over a year ago and does not know exactly what is happening. Trucking company bankruptcies are up sharply—24 percent above a year ago. Truck shipping rates are weak—for the first quarter they were up just slightly year over year, and in the second quarter they were down a couple of percentage points. My contact says that the volume declines are general across the country and widespread across industry segments. The company has reduced capacity and will continue to do so, and others in the industry are doing the same thing. So there is a big inventory of used trucks sitting out there in the market, and some of these trucks are being sold abroad.

In the package delivery business are FedEx and UPS. I mention the names of those companies because it is obvious who is in the package delivery business; you cannot really disguise that. [Laughter] FedEx says that the business is coming in a little below plan and that its volume in less-than-truckload business is flat. Others are down. Domestic express volume is down 2 percent year over year. The ground package network is growing substantially—a lot of that is diversion from the express business because ground delivery is cheaper. FedEx may be delaying some of its expansion projects, putting them off three to twelve months—not fundamentally changing its long-run expansion plans but delaying some capital expenditures, which are expected to be down 10 percent from the earlier plan for this year but still up 10 percent over the previous fiscal year. My

contact expressed confidence that the slowdown is temporary; he expects a pickup in the August-September timeframe. FedEx has no difficulty in hiring the people the company needs except in accounting and audit fields. I heard essentially the same story from UPS. Ground volume there is up about 2 percent year over year. UPS is having to discount rates after putting through price increases last year. Cap-ex is up somewhat in '07 compared with '06. Profit margins are under huge pressure; the pricing environment is very competitive.

I developed a new contact in the QSR industry. Now, you may not know what the QSR industry is, but it stands for "quick serve restaurants." Other people call it fast food. [Laughter] In the restaurant business, the casual dining industry is a more discretionary kind of outlay, and that traffic is down 7 percent year over year. Traffic in the QSR industry is down 5 to 6 percent. This is across the industry, all the different companies in that business. They have been putting through price increases of roughly 3 percent. So in terms of dollar volume, their comps are down—in the 3 percent to 4 percent area.

My contact from a large U.S. bank notes that the economy is in a soft patch that may be extended for a while and that business cash flow and balance sheets are solid. There is something of a mystery as to why cap-ex is not stronger. From proprietary, internal data on credit card usage, I learned that the growth of credit card usage is slowing; it had been about 5 percent year over year and is down to 4 percent. On an early reading of the April data, "distinctly weak" was the comment. Particularly, non-auto sales may have declined—I guess we get the retail sales number on Friday. It is likely that April retail sales are weak. Talking about credit demand, a lot of the demand for C&I loans, according to my contact, is really not the standard C&I type of thing but instead is being driven primarily by merger and acquisition activity, hedge funds, private equity, and state and local government borrowing. Credit quality remains very high.

On the outlook, my take is that the economy has slowed, and the real issue is whether we have a temporary soft patch from which the economy will recover on its own or whether this is the beginning of a cumulative weakness. It is often the case, particularly if you think about some of the models of business cycles, that weakness after a time can feed on itself and become cumulative. I do not think that we know enough to be able to make really a solid estimate on that. I would note that we likely do not have an inventory complication, which has been so important in past business-cycle developments. Inventories seem to be pretty well controlled on the whole. Also, output is certainly being supported by the stock market and by a weaker dollar. I would also note the unabated growth in the monetary aggregates, both MZM and M2—we see no sign of traditional downturn behavior from those measures. I will stop there. Thank you.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Conditions in New England seem broadly supportive of the continued expansion of the region at about the pace of the nation as a whole, perhaps because the pace of national activity has slowed somewhat and so the region seems to be lagging less, though I do think there is a bit of a brighter tone to economic activity. I certainly do not want to overemphasize that, however, as concerns do linger about the strength of job growth and the housing market, among other things.

Two matters came up in our rounds of gathering data and anecdotes around the region. First, although growth in overall labor costs in the region is moderate relative to that of the nation, concerns continue about the cost and availability of skilled labor. Respondents are also increasingly concerned about other input costs—oil, copper, zinc, other metals, and chemicals—and report that they are attempting to pass on higher costs within the supply chain or directly to consumers and are succeeding in many cases. We have not heard much locally yet about the effect of three dollars a

gallon for gasoline, and I am hoping the refinery outages that apparently caused this uptick prove temporary enough not to dent regional demand or to increase price pressures. However, the general rise in primary energy costs is not particularly reassuring. Second, while the residential real estate data for the region continue to be downbeat in terms of permits, starts, year-over-year sales, and price trends, anecdotes—particularly as they regard high-end markets, as I noted before—offer some hope that the spring picture for sales of existing homes will be brighter when all the data are in. I had a comment in here about spring weather; but that turned yesterday, so I won't make that comment. [Laughter]

The incoming data since the last Committee meeting contained some pluses and minuses that, by and large, offset one another. Thus our forecast in Boston, which is quite close to the Greenbook and similar to other forecasts around the table, has not changed an awful lot. In short, the economy appears to have made what one hopes is the final step-down in overall growth from its unsustainable momentum of only a year or so ago and is in the process of settling in at a pace that will gradually accelerate over this year to slightly below potential in '08 and '09. This forecast assumes that the effect of the housing bust begins to subside by midyear and that business and consumer confidence remains strong enough to support continued hiring, consumption, and business investment. It also assumes that strength in the rest of the world buoys corporate profits and foreign consumption of our exports and, combined with a slowly declining dollar, adds at least marginally to U.S. growth. All of this occurs with a continuation of very accommodative financial markets that both sustain household wealth and ease borrowing costs and provide a haven for foreign investment flows. Finally, the current boost in energy costs proves temporary, and inflation subsides gradually as unemployment moves up slightly, reflecting the output gap created by a year or more of slightly sub-potential performance. Looking at the data we received on other projections

through '09, our forecast fell within the central tendency in all the areas, but I think that we see inflation as somewhat more persistent than others do—along the lines of the Greenbook. In fact, this forecast sounds pretty good to me as an outcome if it works out this way, and I have even begun to think, versus where I was at the last meeting, that the risks around both sides of this forecast may be a little smaller.

On the growth side, the big question involves spillovers from the housing bust and possibly the problems with subprime adjustable-rate mortgages, but we have been expecting to see spillovers for some time, and they are yet to emerge in any real way. They still might, and we, like the Greenbook authors, have marked down our forecast for residential investment in '07 based on incoming data. But I am inclined to think that broader market and economic spillovers get less likely over time. In fact, as I noted before, maybe there is some leveling-off in sales of existing homes if we smooth through the month-to-month variation in the data. Credit restraints could well damp the participation of subprime borrowers in home purchases, but low mortgage rates ought to support prime borrowers, and we see evidence for this in discussions with local banks and certainly all the advertisements in newspapers and on television that are focusing on the theme that now is the time to borrow because mortgage rates are low and maybe they will not stay that way for long. So we think—I think anyway—that we have some reason to believe that, through this year, home buying may help keep home prices and equity positive or perhaps neutral contributors to household wealth. Indeed, assuming that gasoline prices edge off their current high levels and that equity markets continue on an upward pace, there is at least some possibility on the upside for consumer spending.

Another aspect to the growth forecast that concerned me at our last meeting was the unusually slow pace of business investment in equipment and software. Given the underlying

fundamentals of robust corporate profits, cash reserves, and a declining user cost, especially for high-tech goods, we would have expected faster growth. I am still concerned here, especially as such spending patterns could augur poorly for continued hiring, but I find the most-recent data on orders and shipments and the ISM survey encouraging, although as President Moskow mentioned, one should not take a lot of confidence from a single month's data. So all in all, it seems, to me anyway, that the downside risks around growth in our forecast are a bit less.

On the inflation front, I remain concerned that the forecast is just a bit too perfect. Without too extended a growth slump, unemployment rises slightly, and inflation falls slowly. We have not done the work that San Francisco has on slicing and dicing productivity, and I found Janet's comments very interesting. I also am very much in agreement with her and others' perspective that the level of underlying structural productivity growth may not be declining to the degree that the Greenbook authors seem to think it might. However, if what seems to be a cyclical low continues, unemployment could well be sticky. Both the recent increase in energy and raw material costs and the burgeoning growth in the rest of the world could increase resource pressures at the same time that the dollar continues its slow decline. All of this taken together could be a recipe for accelerating rather than decelerating inflation. As I've noted before, I really have no problem with stable inflation around its current low level. What does concern me, however, is the potential for acceleration. In that regard, the recent small moderation in core data was welcome, though certainly not sufficient to ease this concern entirely.

In sum, I remain ready to bet on the baseline forecast. I think it is about as good as we can hope for. There continue to be risks on both sides, but at this point I would not weigh them equally. Being wrong on the inflation side could be a more difficult place to be. That is, if growth falters, it is clear what to do; but if inflation should accelerate, it might take a while and be quite costly to

remedy. Thus, I would continue to favor policy that incorporates a bit of insurance. But we will get to that later. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Fifth District economic activity continues to be mixed. Our manufacturing indicators continued to drift lower in the past few weeks, apparently diverging from the national trend. This may be because furniture and textiles are particularly weak, and these industries are a significantly greater share of our activity than of activity elsewhere. Respondents' expectations regarding future manufacturing activity remained upbeat but had drifted a bit lower. After two bad months, readings on the District's retail sector have returned to neutral, helped by a sharp turnaround in big ticket sales. Retail employment and wage indexes rose significantly as well, and expectations for future demand increased sharply. For services firms outside the retail sector, our index has moderated a bit over the past three months, though it remains positive, and measures of expected demand have held up quite well. Housing markets in our District are typically busiest this time of year, as elsewhere, and contacts are reporting softer overall sales this year, as you might expect. Having said that, I continue, however, to hear reports that homes priced below \$250,000 or above \$700,000 are selling well. We hear reports of a lack of inventory close to D.C., although President Lockhart has a property for sale you might be interested in. [Laughter]

MR. LOCKHART. If anyone is interested, please see me. [Laughter]

MR. LACKER. Commercial real estate activity generally remains solid, although some observers expressed concern about the sustainability of the quite strong pace of office construction in Northern Virginia. Our survey measures of manufacturing-price trends seem to have moderated since the beginning of the year, consistent with sluggish demand in that sector.

On the services side, price trends seem to have declined somewhat since the first half of last year, although measures of services prices have been choppy and trendless over the past few months as a whole.

Turning to the national economy, housing news has been disappointing, but news about business investment and manufacturing has been encouraging. However, the overall outlook hasn't changed terribly much since our last meeting. Housing begins to stabilize in the second half of this year, business investment in equipment and software picks up, and consumer spending remains relatively healthy. As a result, I expect real growth to return to trend in '08. Although my outlook broadly agrees with that of the Greenbook, there are some minor differences—but I should emphasize that they are minor. First, I remain a tad more optimistic about trend growth. I'm expecting something closer to  $2\frac{3}{4}$  than to  $2\frac{1}{2}$ . Second, I still think that residential investment will bottom out in the middle of the year rather than continue to slide into '08. Of course, it is quite difficult to have a lot of confidence in any one scenario for the housing market, in part because the recent data have been fairly choppy. The figures for homes sales, which late last year suggested that housing demand had stabilized, now suggest that demand may be taking another step downward. If so, this would increase the size of the cumulative reduction in starts relative to new-home sales that will be needed to work off the inventory overhang. It's very hard to know, however, just how far housing activity needs to fall before it comes back into stable alignment with income and preferences. But my hunch is that the drag on growth will not last quite as long as the Greenbook says, and I still see reasonably good prospects for stability in the housing sector in the second half of this year. I also think that the housing correction will have only limited effects on spending outside residential investment. In particular, I'm a bit more optimistic than the Greenbook about household spending.

As for inflation, the Greenbook now has us waiting until the third quarter of '08 before we see a moderation in core inflation. Even then, we get only 0.1 percent. I would view this outcome as fairly disappointing. But if I had been asked for an unconditional forecast, I probably would have submitted something a lot like that. Instead, we were asked for a projection conditional on what, in our judgment, would be an appropriate monetary policy. So the projection I submitted has core PCE inflation at 1.8 percent next year and 1.6 percent in 2009. Under what, in my judgment, would be an appropriate monetary policy, we use the Chairman's July testimony to announce that the FOMC's objective is for PCE inflation to average 1½ percent and that the Committee intends to reduce inflation to that level within two years. While such an announcement would not necessarily shift inflation expectations immediately downward, I project that consistent communications from Committee members accompanied by further rate increases when downside growth risks abate later this year would bring expectations into line with our objective by early next year. Although growth would be weaker this year than in my unconditional forecast, it would ultimately return to trend in 2008, and the properly measured sacrifice ratio would turn out to be significantly smaller than is often assumed or inferred from standard Phillips curve estimates. I mention this scenario simply to reiterate that I believe that there's a feasible alternative to the hypothesis that inflation will settle in around 2 percent or higher unless we engineer a substantial output gap.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. The economy from the perspective of the Fourth District isn't materially different from the way I heard Dave describe national conditions. Manufacturers in the District generally report modest but steady growth. In particular, metals producers and their suppliers report strong orders and production. My business contacts are

telling me that capital investment is a bit soft, but it should not at this point pose a serious problem for the overall economy.

I've had several meetings with homebuilders throughout my District in the past few weeks, and they confirmed some of the information that we see in the national data—sales are still very anemic, and the inventory of unsold homes remains quite high. They also shared some information that is not easy to pull from the national indicators. For example, sales of starter and lower-end homes are particularly slow, in part because lending standards have been significantly tightened. This means that there has been a shift in the composition of homes sold toward the upper end of the price spectrum, causing the reported sales-price data to be a little inflated. The builders I spoke with assure me that price discounts are occurring and that the discounts have been substantial. Likewise, I am told that appraisers are increasingly being asked by lenders to do whatever possible to appraise the properties relative to current market conditions and to discount price information from the historical comparables. My contacts are also saying that the expectation that home prices are going to fall further has been keeping some buyers on the sidelines for now. I also hear that, when possible, residential contractors are shifting resources to nonresidential projects. Some nationally publicly traded home construction companies are completing houses and selling them for a loss in some markets just so that they can exit those markets more quickly. What I take away from my conversations with homebuilders and lenders is that the national data may not yet fully have caught up with the poor conditions in the residential construction sector and, further, those closest to the markets are betting that any semblance of a recovery is still a long way off.

This information had an influence on the economic projections that I submitted for today's meeting. Like the Greenbook, which as a consequence of more weakness in residential

construction has shaved an additional 0.5 percentage point off GDP growth in the latter half of this year, I have marked down my expectations for growth in 2007. My projection sees a little more growth relative to what I see in the Greenbook as we move into 2008 and 2009, although I do see slower economic growth as an obvious risk to my outlook. I'm especially concerned about the possibility of some spillover from the housing sector to the business investment outlook.

My inflation projection calls for a slightly more optimistic trend in core PCE than what I see in the Greenbook. I had difficulty endorsing a three-year projection that doesn't assume that our policies are going to be positioned so that we eventually bring core PCE inflation back below 2 percent, if only just below. So my inflation projection represents my interpretation of appropriate monetary policy—namely one that will bring core PCE in under 2 percent. My economic projection is, therefore, based on a federal funds rate path that is very similar to the Greenbook baseline, a constant path over the projection period; but I have assumed a slightly more optimistic price path for oil. Given Karen's comments this morning, I am a little more comfortable with that assumption. I also have slightly more potential than the Greenbook does. So with these two assumptions, I do have a slightly lower path for inflation than the Greenbook does. Obviously, these assumptions are not made with great conviction, and inflation may continue to track just north of 2 percent. If it does, we do risk conditioning expectations to this level, and that is an outcome that I would not welcome.

I had an opportunity just a few weeks ago to spend a day with Paul Volcker, who visited Cleveland. On the subject of inflation, he reminded me that in his experience big inflations start out as a tolerance of modest inflations. Once inflation expectations drag their anchor a little, it's

difficult and costly to get them re-anchored; and this, I think, remains the biggest risk that we face as a Committee. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. The near-term outlook for the Third District is moderate growth going forward. The major source of the strength in the District continues to be employment growth, and nonresidential construction is fairly stable and modestly healthy. However, manufacturing continues to be sluggish and residential construction weak.

Job growth has picked up considerably in our District, having grown at 0.9 percent at an annual rate in the past few months. Unemployment rates have fallen in the region, and the labor market in Pennsylvania in particular has been especially strong. To get a better handle on labor market conditions, in our last business outlook survey we asked a panel of firms whether they had experienced problems filling jobs in the past three months because applicants didn't have sufficient qualifications. Remarkably, more than two-thirds of our firms said that they had trouble with this and that the percentage has been growing since we first started asking the question three years ago.

The strength in the regional labor markets is reflected in the rebound in our staff's indexes of leading indicators of economic activity in the three states in our District, especially in Pennsylvania, where the index is predicting stronger growth over the remaining three quarters of the year. An area of stability in our region's economy has been the ongoing modest strength in nonresidential construction. The growth in this sector has recently been largely in noncommercial construction—hospitals, education buildings, and so forth. However, general commercial vacancy rates in Philadelphia have been falling steadily, and the absorption rate in Center City is nearly at a record high. With regard to manufacturing, growth is stalled.

According to our April manufacturing survey, our general activity index is close to zero, or just mildly positive, as it has been since late last year. Both new orders and shipments are close to zero, as they were. Further, in April the index of future capital expenditures was down somewhat and below the averages that we have been seeing in most expansions. The only bright spot was the significant bump-up in our future activity index, which signaled that more-robust activity is anticipated by our survey participants. It also comes as no surprise that residential construction remains weak in the District, and housing permits have continued to decline as the value of residential construction contracts has as well. Also, there seems to be little or no appreciation in house prices. On the inflation front in the District, prices paid and prices received by manufacturers have moderated a bit. Further, retailers are reporting very little change in prices over the past few months. In summary, the Third District is growing slowly, and our staff projection is for modest growth going forward. Labor market fundamentals appear strong, but we have yet to see any sign of the pickup in manufacturing that some of the national numbers indicate.

On the national level, since the last meeting I have actually become a bit more comfortable with the economic situation. While I say that I am more comfortable, that's a relative not an absolute statement. The most recent month's readings on core inflation were welcome, but I think that caution and vigilance are still the order of the day. Indeed, the Greenbook authors, as we've noted, seem to have been revising their forecast of core inflation upward slightly over the past several months rather than downward, and that to me is a bit disturbing, even if the numbers don't change a whole lot.

News that has made me more comfortable with the projection of a somewhat quicker return to something closer to trend growth in the second half of the year is the recent strength in

durable goods orders and the ISM numbers, which are indicating that manufacturing has picked up. Further, recent strength in manufacturing was broadly based, and the output of business equipment was strong. Along this dimension, I am in agreement with the latest forecast of the Board staff. However, these reports represent only one month of data, as people have said, and although they are consistent with a modest bounceback in the second quarter, there is still substantial uncertainty. I hope that, in the coming months, those data will be reinforced as new data come in; but, again, at this point that is only wishful thinking. I would add, though, that my business contacts, particularly in the financial sector, continue to report to me that business loans are strong, C&I loans are strong, demand is strong for loans, and balance sheets and firms still look good. So they see things as looking good from their perspective, but that positive news is not really showing up in some of these other numbers, at least as yet. So I'm a bit puzzled by that. Furthermore, job growth and personal income growth appear to be on solid footing, and I find myself increasingly puzzled by the weakness in the labor market as portrayed by the Greenbook forecast. The strength in personal income, along with a rebound in asset markets, leads me to view consumption as somewhat healthier going forward than the Greenbook sees it. Those circumstances, coupled with the more positive news on investment to which I just alluded, lead me to view closer-to-trend growth as the best forecast and, therefore, to have a little more optimism in my outlook for the second half of the year and into '08. That is reflected in the forecast that I submitted.

That said, I realize there are significant risks to this return to trend growth. The biggest risk remains housing. The extreme fluctuations in weather over the past four to five months have made discerning trends a lot more difficult, and I'm not sure exactly how much seasonal adjustment factors are bouncing the numbers around and making it harder to disentangle effects.

Inventories of housing, as we have talked about, remain extremely high, and there is very little signal of a pickup in demand, at least as yet. However, I'm a little skeptical that this sector will continue to subtract a full percentage point of real growth from the forecast, as the Greenbook suggests. I'm a little more optimistic than that. I remain optimistic in part because I think real mortgage rates remain relatively low. I see strong income growth continuing, and I am increasingly less concerned, actually, about the spillover from subprime markets. So I can envision housing demand strengthening a bit more than is implied in the Greenbook, and that leads to less of a subtraction going forward.

On the inflation front, I'm a bit less worried than last time but far from sanguine. The last core PCE inflation number was obviously very encouraging at something close to zero, but, again, we have to be very careful in extrapolating out one month's data. As I said before, the Greenbook authors seem to be inching up their forecast of core inflation or at least pushing the decline out further into the future, and that concerns me a bit. I believe inflation is still too high. Inflation expectations are stable, but they are too high as well, and we need to bring that rate down. Thus, we need to be vigilant here and continue with a somewhat restrictive policy.

In regard to my forecast, I'm not going to say much. I just assure you that, without collusion, President Lacker's view of the forecast and how it evolves is very similar to mine. So rather than repeat what he said, I will just let his comments largely speak for mine. I have a slightly faster return to trend growth, partly because my productivity estimates are somewhat higher. I thought Janet Yellen's comments about her productivity analysis were quite thoughtful, and I appreciate them. The optimal monetary policy, or at least my preferred path for monetary policy, might include some tightening if trend growth returns more quickly than we had

indicated. But, indeed, my forecast for core PCE was actually down to 1.7 percent by 2009. I'll stop there. Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I gave a fairly detailed summary of the District's economy last time, and it hasn't changed a great deal since then. So I'll be fairly brief. The labor markets in the region remain fairly tight; they have not loosened at all since our last meeting. Our manufacturing sector continues to show strength. Our agricultural sector continues to show strength. Housing is the one area that, as in other parts of the country, has shown weakness as inventories have built; but we haven't seen dramatic declines in prices at this point, and we will watch that, as others are watching it within their regions.

On the national outlook, we see that the economy will continue to grow at something below trend. We're a little more optimistic than the Greenbook, but the point is that we should see the economy grow below trend. For all the reasons that others have said, we expect inflation to moderate, but reasonably slowly, over the next eighteen months. Therefore, anticipating the next discussion, I would say that, as a policy group, we need to be resolute in our own policies in terms of holding our positions fairly firm. So I'll leave it at that until we get to the policy discussion, Mr. Chairman. Thank you.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. My outlook for the economy, which is essentially for sustained growth near trend and for a modest diminution of core inflation over time, hasn't changed appreciably. To be sure, I have marked down my forecast for this year, largely in recognition of reality—that is, the weak first quarter, and I anticipate some further sluggishness in the second quarter as well. But after that, I expect growth to accelerate to near

trend. Underpinning that anticipated performance is productivity improvement of something like 2¼ percent a year or maybe a little less, and employment gains in the neighborhood of 0.6 to 0.8 percentage point per year. On the demand side, I expect sustained increases in consumer spending; in business investment, including structures; and in net exports. I don't think the outlook for the housing sector has really changed appreciably recently, at least relative to what I had been expecting. Given that inventory levels were and are still high, I think that it will be some time before we see any meaningful improvement in residential construction. My confidence in this general view of the outlook is heightened by my interpretation of history. The economy grew 3 percent or better over the four years from 2003 through 2006. More important and more broadly, if you think about the performance of the economy over the past two and a half decades, it hasn't been wise to make major bets against sustained, healthy growth. So that's what I'm really expecting.

As for inflation, because I view the current stance of monetary policy as moderately restrictive—and the basis for that is some versions of the Taylor rule, estimates of the real federal funds rate relative to its equilibrium, and some rules of thumb that we have—I do expect that core inflation will gradually slow from here, assuming that we maintain the approximate stance of policy that we have adopted. I think that another reason is that some of the uptick in core inflation was transitory. I would add that, if you look at the latest three-, six-, and twelve-month increases in core CPI or core PCE, you do in fact see some waning of inflation. Of course, the waning is due in part to the favorable numbers we got in March, but it doesn't appear to be exclusively due to the March numbers. In any event, if inflation is going to slow, it has to be in the latest numbers. [Laughter] I mean, there is no other way for that to occur. With that, I will conclude.

CHAIRMAN BERNANKE. Thank you for the arithmetic. [Laughter]

MR. STERN. Sometimes the obvious escapes me. [Laughter]

CHAIRMAN BERNANKE. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. Since the last meeting, aggregate economic activity in the Sixth District has expanded moderately. Employment momentum in most areas of the District continues to exceed that of the nation overall. Florida is our exception. Most areas of Florida now lag the nation. Similarly, the housing downturn, as measured by sales and permits, remains less severe in the District than for the nation, except for much of Florida. The housing downturn in Florida has shown little sign of bottoming out, as builders continue to expect even lower levels of construction. Permit issuance continues in steep decline, down over 50 percent from March a year ago. We are not inclined to suggest that there is significance for the nation as a whole in the Florida developments. We have heard anecdotal views from Florida that there was a run-up in speculative activity in the second-home market in 2004 and 2005. Buyers were bidding up prices in anticipation of flipping properties at higher prices. So Florida is idiosyncratic. It is idiosyncratic also in the state's ongoing insurance cost problem related to hurricane risk. However, in the Atlanta region, the conversations we've had with homebuilders about the housing market raised concern of a steepening decline in sales of new homes. Atlanta has generally tracked the nation, so we are carefully watching housing-sector developments in Georgia, particularly in Atlanta.

Despite these negatives in the housing sector, we continue to find only limited evidence of spillover from the residential real estate adjustment to other sectors of the regional economy. Labor markets appear to have remained very tight in the District. The measured unemployment rate is around 4 percent for the District versus 4.4 percent nationally. Even the demand for

skilled building tradesmen appears strong, as builders—and this may be relevant to the earlier discussion—seem to be taking the opportunity to upgrade the quality of their staffs. Trends in state sales tax revenue support the view that consumer spending has been relatively unaffected by the housing downturn. Again, the exception is Florida, where sales tax revenues in the first quarter were substantially below year-ago levels.

Our perspective on the national economy is that significant uncertainty remains about the overall outlook for 2007 and for the path of inflation. Our economic staff uses three models to forecast the key macroeconomic measures. Our average forecast for real GDP growth is generally in line with the Greenbook forecast, and neither suggests that a recession is a risk. There are minor differences between our composite forecast and the Greenbook on unemployment. The only significant difference is the declining path of inflation in the Greenbook versus our inflation forecast that holds steady around 2.3 percent for the forecast period. So, to summarize, we harbor greater doubt than the Board staff that the inflation rate will come down as projected in 2007.

CHAIRMAN BERNANKE. Thank you. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. Our outlook has changed very little. As in March, we see the expansion continuing, with growth moving back up to potential—we see potential around 3 percent—later this year. This view rests on the familiar expectations: Housing stabilizes relatively soon without a major drop in prices; investment spending strengthens somewhat as the temporary factors holding it down recede and positive fundamentals reassert themselves; consumption moderates a bit but continues to be supported by strong income growth; the saving rate moves up but only modestly and slowly; and external demand remains strong. We still expect inflation to moderate gradually to a rate just below

2 percent for the core PCE by the end of '08. We view the recent numbers as somewhat reassuring. Recent data in general have provided a bit more comfort for this scenario. On balance, the downside risks to growth have diminished a bit. The risk that inflation will fail to moderate sufficiently, however, remains significant and material. But in general, the overall outlook, in our view, hasn't changed that much.

Now, our forecast assumes that we hold the fed funds rate where it is for a while. Our expected path is above the market's but below the Greenbook's. We're below the Greenbook because, although our expected forecast is really similar, we attach somewhat greater weight to alternative scenarios that suggest slower growth. The recent growth numbers have been, on balance, encouraging, and the markets are a bit more confident about the outlook than they were. But I still think the downside risks to growth are significant. Housing could still surprise on the downside, and we could see a deeper, more protracted contraction in activity and, of course, broadly based more-substantial declines in prices. Consumption could be weaker for this reason or because the saving rate rises for other reasons, such as pessimism about long-run income growth. The household sector is substantially more leveraged than it was, and it has less of a cushion to absorb shocks and, therefore, presents some risk of amplifying rather than mitigating broader weakness in the economy. Although a bit better than it was in March, the investment outlook is still a bit tenuous, and it seems unlikely to be a substantial source of strength if broader weakness in demand in the rest of the economy materializes. The most rapidly growing parts of the world are growing well above potential and face rising inflation and substantial asset-price inflation, and I think the authorities there are generally starting tentatively to tighten policy more significantly.

On the inflation front, we still face substantial uncertainty about what is happening to underlying trends and how they will evolve. The broader inflation environment is, if anything, less benign than it has been over the past three quarters, with inflation accelerating a little outside the United States, energy and commodity prices continuing to show signs of rapid demand growth, the dollar potentially weakening further, compensation here firming a bit, and productivity growth probably staying a bit below what we thought was trend. In this context, with inflation still running about 2 percent, inflation expectations could drift up.

Continuing on the risks for a bit, I still think we live with a significant risk of a sharp deterioration in financial markets. Credit spreads, other risk premiums, low levels of implied volatility, and the strength of asset prices in many parts of the world—all imply a level of confidence in ongoing, stable growth and low inflation that seems a bit implausible. In addition, the low level of long forward rates seems hard to reconcile with the strength of demand growth outside the United States, suggesting that much of the world is likely to need to move further toward tighter monetary policy. As financial conditions exert more restraint on demand growth globally, we could see a rapid unwinding of this long period of very benign assessment of fundamental risks. We, of course, face some risk of policy actions here in the form of trade or investment protection. This risk, against the backdrop of some uncertainty about the strength of productivity growth going forward, might make the rest of the world less comfortable financing our still-large external balance on the favorable terms that have prevailed thus far.

On the longer-term outlook for potential in the United States, we are sticking with our forecast of 3 percent, but we have altered the mix a bit, just as the Greenbook has in some sense; however, we feel a little less comfortable with our basic view about potential. We lowered our productivity growth assumption a bit, to 2.25 for the nonfarm business sector, and raised our

estimate of trend hours a bit. If potential is lower than we're assuming, then we are less likely to see the moderation of inflation that we currently expect, but we would expect a lower path for output growth as well. At this stage, however, in view of the strength in income growth that we've seen, earning expectations, and other measures, we're reluctant to embrace a more negative view about growth in potential.

On balance, in view of these risks, I favor staying where we are for a while. I don't think there is a very strong case for tightening policy or for inducing a significant rise in market expectations about the path of the fed funds rate going forward, nor do I think now that we're at risk of being too tight. So, in general, I think the best choice for us is to continue to lean against the expectation that we will move to reduce rates soon. Thank you.

CHAIRMAN BERNANKE. Thank you. It is 10:30. Why don't we take a twenty-minute coffee break and adjourn until about 10:50. Thank you.

[Coffee break]

CHAIRMAN BERNANKE. Okay. Let's reconvene. President Minehan has a two-hander.

MS. MINEHAN. A quick comment was just brought to mind because of Tim's comments. I regularly meet with a group of investment people before FOMC meetings. Compared with the past several months—particularly during the time of the last meeting, when we were just coming off some financial market upset, especially in the equity markets—they were saying that they felt that financial markets were frothier right now than they had been over the past three or four years; there was more money out there chasing more deals and a level of froth that to them seemed unsustainable. I don't know what implications that has for current policysetting—I'm not wise enough to know that. But I do see it, as Tim indicated that he did, as

a risk that lies over the whole environment. Even though we have slower growth and somewhat higher inflation, this overall forecast is so benign; and despite what the yield curve and the fed funds futures tell us, the market seems to be buying into the whole benign outlook and thinking that it's going to continue forever. Clearly it won't. What the spillover effects will be and what we can do about them now or in succeeding meetings are questions to which I don't have an answer; but I do think they are questions, and I would like to reiterate what Tim had to say.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. My outlook, like most of the rest of yours, was basically the same as the one in the Greenbook, and it hasn't changed all that much over the past few weeks. Like the rest of you, I see income growing at less than the growth rate of potential for several quarters, the pace held down by housing and the slower growth of consumption that has become evident in recent data and confirmed by President Poole's reports. This is offset over time by a strengthening of business spending, the end to the inventory correction that we see in IP and ISM statements, and a pickup in capital expenditures as businesses feel more comfortable that the expansion will continue and that any overbuilding they did when income growth was higher in those three or four years that President Stern was talking about has been absorbed. Like the rest of you, I see a pickup in demand to something like the growth rate of potential some time next year as housing activity adjusts to the lower level of demand and as inventory is worked off. Several favorable factors support this eventual return to potential: supportive financial conditions, especially for businesses; credit availability, which we've just been talking about; narrow credit spreads; low long-term rates; and good foreign demand—another upward adjustment in this Greenbook to rest-of-the-world economic growth; and the decline in the dollar—which will support exports. I used the staff structural growth of 2½

percent. It seemed to me that the adjustments the staff made were small, offsetting in participation and productivity, and looked reasonable given the recent data. There is still a tension between the labor data and having potential growth as high as it is, and it leaves the staff in a position in which labor force participation is slightly above the trend, which strikes me as where it ought to be when the unemployment rate is slightly below the NAIRU. Also, productivity is slightly below the trend, so they need faster-than-trend productivity growth just to get back to their now lower trend, which strikes me as where it ought to be after three or four quarters of below-trend growth and presumably some labor hoarding, but not that much below trend. So that looked like a reasonable assumption to me, and that's what I used in my projection.

I differ from the Greenbook in a couple of respects. One is that I had softer equity and house prices than the staff did. On the equity front—I think I said this last time—I expected equity prices to be soft, and they're up 6 percent. [Laughter] Fortunately, I don't back my predictions with my personal wealth. But—I'm going to hold to that prediction—[laughter] the market still seems to be building in a more rapid increase in profits than seems consistent with moderate nominal GDP growth and some rebalancing of the labor-capital share, which we may be beginning to see. Certainly, there is practically no growth at all in domestic profits in the Greenbook for '08. Now, the market may get more from the foreign profits, as people have been saying, but I think there is potential for disappointment there. On house prices, inventories are large, and the price-to-rent ratio is still extremely high. On the demand side, I think demand is being damped by tightening in subprime and alt-A markets. On the supply side, there will be some more foreclosures, particularly as rates adjust up this year. So I presume that prices will need to drop somewhat, rather than just stay level as in the staff forecast, even to get the housing

stabilization and eventual slight rebound that the staff and I included in our real GDP forecast. Now, to offset the effects of weakness in wealth from these prices, I had a slight easing of monetary policy this year, next year, and the following year— $\frac{1}{4}$  percentage point each year—to get that same output. This was only a slight easing in real rates given that inflation is edging down and inflation expectations aren't presumed to change very much. I did this in the context of what I would have as an interim inflation target of 2 percent. I think 2 percent is achievable without significant output loss: It is low by historical standards and broadly consistent with price stability and minimal welfare distortions relative to  $1\frac{1}{2}$  percent. I agree that a little lower might be nice eventually, but I would get there opportunistically by leaning against any increases and accepting decreases rather than deliberately going to  $1\frac{1}{2}$  percent. I'm skeptical about the expectations effect that might accrue from the announcement of a  $1\frac{1}{2}$  percent commitment.

A second difference with the Greenbook is that I assumed a slightly lower NAIRU— $4\frac{3}{4}$  percent. Any point estimate is silly—we really have only the vaguest idea—but it seemed to me that the compensation data, the price data, of the past few years were more consistent with a NAIRU that was a bit below 5—and so I assumed  $4\frac{3}{4}$  percent. As a consequence, I had slightly less inflation than the staff forecast—0.1 in '07 and in '08. So I had 2.2 in '07 and 2.0 in '08 and had it staying there in '09. In some sense I thought the more interesting part of the forecast was thinking about the second moments—the skews and the probabilities around the central tendencies. I confess that for '07 I committed the sin of thinking things were more uncertain than usual, Mr. Chairman. [Laughter] I hate it when I hear people say that.

CHAIRMAN BERNANKE. They're always more uncertain than usual. [Laughter]

MR. KOHN. So here is my reasoning. I thought that the average includes lots of episodes of more or less steady growth in steady state and then other episodes of cyclical

adjustments. In my mind, we were in the middle of a kind of mini-cycle, which was an adjustment from greater-than-sustainable growth to growth that we hope is sustainable. We've seen that the adjustment had already created some inventory overhangs and some changes in capital spending plans. So I thought that, because we're not at a steady state, things might be a little more uncertain than usual. But I compensated for that by narrowing my confidence bands in '08 and '09 [laughter] when I think we'll be close to a kind of a steady state.

On the skews part, like President Geithner, I had downside skews on output. It wasn't so much housing because I think that, with the adjustment to demand or activity that's in the staff forecast and my own adjustment to prices, the risks around that are approximately balanced. Nor was it a spreading of problems in the subprime market to other credit markets; I think we've seen enough since the subprime problems started to be pretty sure that the risk is no more than the normal kind. Rather, the risk I saw was from concerns about the financial position and the psychology of the household sector and the interaction of those with housing. So it was a spillover in some sense from housing to consumption. The financial obligations ratio is very high. Households, as President Geithner noted, are highly leveraged. One of the surprises to me in the development of subprime markets was apparently how many borrowers and lenders were counting on the future appreciation in houses just to support the debt service, to say nothing of the consumption that must be going on at the same time. I suspect that this is more widespread than just the subprime market. How many households were expecting price appreciation to continue more as it did before rather than to slow down or even for prices to decline (as I think they will), it's hard to say. But I suspect there are a lot of these households, and I think we could get some feedback there. The staff has the saving rate actually declining in the second and third quarters, and there might be some technical reasons for that. Even to get modest consumption

growth, we see a very gradual uptrend in the saving rate over time. That might be the most likely outcome, but it did suggest to me that there is at least some fatter tail on the possibility that households, seeing what's happening in the housing market and to their financial obligations, will draw back more quickly from spending.

When President Geithner and I were in Basel, the most popular question to us was whether capital spending would really pick up again. A number of central bankers doubted that that could happen as long as consumption wasn't growing more rapidly. But I'm comfortable with the capital spending pattern so long as the consumption pattern looks something like the pattern in the Greenbook and like the one that I have as my most likely outcome.

More generally, as you pointed out at one point last fall, Mr. Chairman, I think we're in a very unusual situation of below-potential growth for an extended period—a situation that is pretty much unprecedented without breaking out one way or another. Some nonlinearity is going to come up and bite us here, and, as I see it, the nonlinearity is most likely in the household sector.

Now, if income proceeds along the expected path, it seems to me that there are upside risks to inflation moving down to 2 percent and staying there in our forecast. I think that overall we're facing a more difficult inflation environment than we have for the past ten years or so: the high level of resource utilization; rising import prices from the decline in the dollar and the high level of demand relative to potential supply globally, including in the emerging-market economies—one thing we heard in Basel was that increasing numbers of these economies are having trouble sterilizing their reserve accumulation and are running into inflation pressures from that happening—higher prices for energy, food, and other commodities; higher headline inflation; and possibly even slower trend productivity growth. I didn't see a downside skew to

any of these things. But, as I thought about the whole picture with all these things seeming to tilt a bit on one side and their interaction, it seemed to me that there was some upside risk to the possibility that inflation expectations would rise rather than stay where they are as assumed in my most likely outcome. Now, for policy purposes, I would weight the upside risk to inflation more than the downside risk to growth, but we'll get to that later in the day. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. My own views on the economy haven't changed much since we last met and aren't terribly at odds with the Greenbook. I'd highlight a couple of reasons for concern, a couple of areas in which the misses could be severe. I share the views expressed by many around the table, most recently by Governor Kohn, on the inflation front. I remain quite concerned about inflation prospects, and I'm keeping a wary eye on inflation expectations, particularly if there were to be acceleration in the trends on commodity prices or the foreign exchange value of the dollar. My sense is that the markets haven't fully taken into account what that could be, and we could find the markets more preoccupied with an inflation scare than they appear to be at this moment. So I think that, during the balance of '07, the inflation risks tend to be more significant than the growth risks, and I would expect to see sequential increases in GDP, as in the Greenbook, as we go through the next several quarters. The big point of what that is predicated on is really the continued accommodation in the credit markets and the capital markets, as several people have noted.

I was thinking about my projections and, as we look to '08 and '09, the bigger risks there tend to be more policy oriented as we head into the next election, and they may well have some effect on the capital markets. So as I think about the second half of '08 and the first half of '09

and what the likely GDP implications would be, I can't help but think that changes or perceived changes in tax policy and trade policy could be the biggest drivers to the capital markets and, as a result, have the biggest effects on the macroeconomy. So there are huge risks, as I look beyond '07, in terms of where GDP might come out; but as a central case, the Greenbook formulation looks roughly in accord with my own.

Let me spend a moment on consumption. My view is broadly consistent with what others have said earlier today. I spoke in the past week with one credit card company whose customer base is similar to the average aggregate customer base in the United States. They have about one-fifth of all credit card spending, and they reported to me their April results, which might provide us with some clues about PCE growth and credit quality. Card spending for April, from their perspective, was consistent with moderate deceleration in real consumption. They ended up in April with nominal year-over-year growth of about 4 percent in non-auto retail sales, which is a slowdown from the fourth quarter of '06 and a slowdown from January, but it is up a bit from February and March, when they were getting quite despondent and were worrying a bit about their projections for the next three quarters. They think their April numbers look okay, quite consistent with the moderate deceleration that many folks here have talked about. They believe that they have hit the floor on that, but time will tell. What they have not been able to do, at least up to the time of my discussions with them, is to break out retail purchases outside fuel to find out whether less strength is there than the 4 percent top-line number would suggest. I suspect that would be the case. How all this fits into market expectations we'll know over the next couple of days. This strikes me as an average, okay number that may be a touch better than market expectations, but it shouldn't give us a whole lot of comfort if we're trying to suggest that there is a robust recovery on consumption and PCE. Credit quality remains very strong across

consumer credit and the company's mortgage products. I would note that they don't have much subprime in their portfolio—what is subprime has fallen to that level rather than having begun there when they issued the credit. Payment rates, use of credit lines, delinquencies, charge-offs—all are at very positive levels with little indication of more-serious weakening of consumer demand. So, again, I think the prospects outlined by the Greenbook in terms of PCE look broadly consistent with the April numbers.

Let me turn now to the capital markets and the credit markets and speak about three or four observations that may be a bit more newsworthy than when we last met six weeks ago. First, I will talk a little about the dearth of defaults in corporate loans, then spend a couple of moments on private equity, building on Bill Dudley's discussion at the outset on the correlation among asset classes, and finally spend a moment on the shakeout in the mortgage markets. The predicate for this is something that we all know, and several people have spoken about earlier today. As corporate America has become more cautious, Wall Street has become more aggressive to satisfy investors' appetites for risk. So we're seeing risk aversion in one category on Main Street and real risk-seeking behavior on Wall Street. Financial risk-taking remains high and may well have even increased since we last met. If you'll look at the MOVE options index measuring one-month volatility on Treasuries, it's the lowest it has been in about nine years, since the index came into being, and it suggests President Minehan's point that all the forces of liquidity and froth that might be in the market are probably more present today than any of us could have imagined given the tumult in the markets in late February. At the same time, nonfinancial corporate risk-taking continues to be more subdued than objective measures would suggest it should be. There is reason to hope that the cap-ex data will come around to where many of us expected it to be already, but some determination still needs to be done on that. So

we hear, and some of us even say, that these capital markets appear priced to perfection, that credit markets are as strong as ever, and that liquidity is plentiful. I would add my concern to the implausibility of that notion, which President Geithner and others spoke about. The reason for central bankers to worry is, of course, that these narrower spreads provide less of a shock absorber for unforeseen events.

Let me now go through the points that I mentioned at the outset and describe their implications for the decisions we make. First is the dearth of defaults on corporate loans. Historically low year-ahead default rates were referenced in the Greenbook, and they should give us comfort, at least in theory. I share the Greenbook view that corporate defaults should increase as profits level out and leverage increases to more normal levels. But fewer defaults are even possible in this financing environment, and that makes me a little less sanguine about those data. If we think about covenant packages on corporate loans, both originated on Wall Street and originated at community banks—I think President Yellen spoke at a previous meeting about covenant-lite deals—it is incredibly hard to get defaults in the context of these loans, never mind event-of-default notices and everything else that would find its way into the indentures. As a result, we have seen a recent spate of financings with covenant packages that are increasingly issuer-friendly, without triggers that would otherwise cause defaults: no debt payment schedules, never mind even the need to make interest payments, with the ability to turn those into sort of pay-in-kind notes. All of that, it strikes me, should make us nervous if business fundamentals shift abruptly and investors are left with little opportunity to gain access to their capital or to be in a position to force companies to restructure their operations. As a result I am less sanguine about these low default data that we continue to receive from Wall Street.

A second point is the state of private equity in the capital markets. What I note builds on the recent history that we've seen: massive fund-raisings; larger LBOs; increasing leverage; in the past twelve months, we've seen the so-called club deal phenomenon; the growth of equity bridges, which I and others have talked about; and when we last met, we discussed the interest many of these firms have for rushing into the capital markets by finding permanent capital. The newest development is the growth of syndication in the equity placement in these LBO markets. The same way that we have syndicated debt markets that have matured incredibly over the past six to ten years, on the equity side there are huge investments that are presently being considered and potentially being made. So one LBO sponsor might fund a certain portion of the equity check on an LBO and then line up, through an equity syndicate manager at a traditional investment bank or a commercial bank, the ability to sell down the rest of that equity through an infrastructure and distribution system that is being built. I doubt that we will see that syndication market five years from now as deep and as large as the debt markets. But I do think that it shows us that new liquidity continues to come even to the private placement 144(a) markets alongside the growth in the public capital markets. That liquidity could well improve tradability. To the extent that these syndications are new, they show us that liquidity is plentiful; but they also show us that many of these new mechanisms have not been stress-tested. The other implication of this boom in private equity is that it has raised the floor on equity prices. My sense is that there is a private equity put that may well have replaced what used to be thought of as a Federal Reserve put on the floor of equity prices, and that equity put appears to be larger than it has ever been. Thus we have seen increased total leverage through these structured products; credit markets, as I've mentioned, are more robust; and there is a question of stress testing, which is still to be determined.

Another point on the capital markets relates to what Bill said about the correlation among asset classes. CEOs, CFOs, and chief risk officers of large financial firms have found quite troubling the greater correlation among asset classes than most of their internal models had suggested. As they looked at their dashboards in the weeks after the tumult that we saw last February, they grew increasingly uncomfortable about whether they had accurately measured what their firms' downside risks are. Certainly it's encouraging, as Bill showed us, that there appears to be less correlation over recent weeks. That's a lesson being learned and relearned and tested and retested in these institutions. That they may be heeding the wakeup call is good news, but time will tell whether it will be enough to catch up before problems arise in the market.

My final point concerns the consequences of a shakeout in the mortgage markets. My sense is that, after the fallout in subprime, the market is becoming more consolidated with larger, more-sophisticated lenders that can more quickly provide more markets that satisfy customers' newest wants. The success in these markets of investment banks and hedge funds will go to those with scale, with strong distribution systems, and with control over their servicing businesses, so that they are effectively able to engineer workouts and avoid the need to foreclose. I think that over the balance of this year we will hear more news from small and medium-sized commercial banks that feel as though their market share is being taken away during this tumult, and that is something that we need to continue to observe. With that, Mr. Chairman, I'll save the rest of my comments for the next round.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you very much. The last time we met, one theme was the greater uncertainty, and Governor Kohn mentioned that he is feeling greater uncertainty now than he ever had. I am not sure that greater uncertainty has been the tenor of the comments here today, but I

think it has been greater uncertainty with downside risk. So the key issue from last time that I think is still with us is that we certainly saw evidence of the slowdown and, as President Stern mentioned, that sometimes we have to acknowledge reality, and we did have much slower growth than many people had been expecting in the two previous meetings. The Greenbook suggests that the slowdown is unlikely to persist—and I broadly agree with that view, as do many people around the table—but I want to review five key uncertainties that we talked about last time and to discuss how they developed and where they are likely to go.

The first uncertainty is investment, and of course, a lot of us have spoken about that. I would rate the level of uncertainty as still elevated there. I am not going to use color coding to rate that uncertainty, but I would say it is still elevated. We have recently gotten some more-solid numbers, but those are just recent; and I think it is still more a glimmer of hope than something we can bank on that we are going to get a turnaround in investment. That we have seen some better numbers in ISM, durable goods, and so forth says that the direction is perhaps a little more positive than we were thinking six weeks ago. But there is still a reasonable amount of uncertainty about whether the pickup in business investment will help offset any slowdown in consumption to make sure that we continue to grow in the 2 percent range going forward.

The second uncertainty is productivity and potential output. Obviously that is still at an elevated level. As far as I am concerned, it is one of the biggest challenges for us to think about in the intermediate run. In particular, a downside scenario that concerns me is that, if we do not have a pickup in investment, we are unlikely to see a sustained rise in productivity growth. If perhaps one reason for the lower investment is that there are concerns about productivity growth or returns from that investment, we could have a fairly negative scenario in which we get much lower potential output. Offsetting that concern is that we are seeing some glimmers of hope on investment. With

respect to potential, I think it is appropriate that the Greenbook has raised participation rates a bit, given that older people seem to be healthier than previous cohorts were and seem to be more willing to work. However, I think the big question mark is, exactly as David said, that not until August will we get a better feel for which way the data revision will go because the difference between the two sides of the balance sheet is fairly big. Broadly, I share Gary Stern's optimism that it is not a good bet to bet against the U.S. economy and against ultimately good productivity growth. But I have the concern that I do not fully understand the slowness of the investment recovery and some of the productivity slowdown. There is potentially a worrying downside scenario there.

Third is the uncertainty about the housing market and subprime. Well, obviously, uncertainty on subprime was highly elevated then, and it has come down quite a bit. We have seen some tightening of lending standards, particularly at the lower end. The survey of senior loan officers asked for a differentiation between subprime and prime lending standards. It showed a very dramatic increase in subprime standards, which is exactly what we would expect in this kind of market, certainly potentially reducing demand at least in the lower end of the housing market. About the housing market in and of itself, the uncertainty is still there. We still have a lot of uncertainty about whether the numbers are telling us about weather or about the actual strength of the market. As I think I have mentioned to a number of you before, we need to have, besides Dave, a meteorologist on the staff to forecast the weather because every number we hear on the housing market is not a number in which we can put any stock; it all has to do with heat or cold or rain or snow or whatever other thing that Mother Nature may throw at us. So I still think there is a pretty mixed picture there. As I said, we have seen very little evidence of spillovers from the subprime market. The main concern, and this is a variation of what Governor Warsh said, is that something we or the Congress might do might cut off this market. We have to be mindful of any actions that

we may be taking with respect to guidance, as well as of any actions that the Congress may be taking, that could reduce this market more than otherwise.

The yield curve is favorable for a lot of the variable-rate subprime borrowers to move into fixed-rate products, with payment shock of perhaps no more than 50 basis points. The delinquencies we have been seeing have not been due to resets or to payment shock. They have been due primarily to the so-called juvenile delinquents—the early defaulters going bad. That means that we do not know what is coming down the line because we have not really seen the experience of the resets. Now, with the recently benign yield curve, that situation could reasonably be worked out. The key is whether any equity is left. If no equity is left and the resets come, these guys are likely to walk. If they have been doing risk layering—putting really no money down—and the prices go down, that will be a problem. So I think that may be a bit of a slow burn. Coupled with the broader misalignment that we are seeing now of a little increase in housing starts, which in some ways we would see as a positive, is a sort of negative given that housing sales seem to be declining so much. Thus there seems to be a disconnect between supply and demand, and I think the Greenbook is now quite wisely saying that we will likely have a longer transition in the housing market.

A fourth area of uncertainty that we talked about last time was the financial markets—the dramatic spike up in volatility. That volatility spike has come down, but we, being good economists, can never be satisfied with either high volatility or low volatility. Low volatility is of concern to us, and I very much share the concerns that Tim, Cathy, Kevin, and others have mentioned. Not only in the United States, but also in the rest of the world, are some of those spreads a bit narrower than they otherwise would be. In particular, there are concerns about banks chasing private equity deals going covenant-free. In many of my discussions with private equity

folks, instead of saying, well, bring us on more capital, those contacts are the ones saying that the banks are pushing them to take greater leverage than they otherwise would want. Now, if that isn't the fox guarding the henhouse, I do not know what is. You want the banks to be the disciplinary force, and that they would potentially be taking on very large risks is a real concern.

The fifth area of uncertainty was consumption. We have seen a bit of a step-down in consumption growth, but there is still a lot of uncertainty, and I share the exact concerns that Governor Kohn articulated; given that there are likely to be some wealth effects, even though we have some offsetting effects in the stock market, I do not want to bet on those offsetting effects in the stock market being there for the next three quarters. Housing wealth seems to be flattening, if not coming down, with the Case-Shiller index on average for those ten markets down 3 to 5 percent. If people's thinking about their consumption pattern is based on some increase in housing wealth, the saving rate should at least gradually increase. At some point, that reality may be biting and leading to some concern.

On the inflation front, once again, we will have continuing uncertainty about what drives short-term to intermediate-term inflation. As I mentioned last time, we get very, very mild effects from the traditional things that we think that make a difference. Oil, energy, commodity prices, and resource utilization don't seem to have that much force, but in both the short and intermediate terms I think they are leaning on the positive side rather than on the negative side. We still have the owners' equivalent rent issue that is coming in with the transition in the housing market and is still to some extent temporarily pushing up our measured inflation rates. Inflation expectations continue to seem to be quite well contained, and that, I think, is key because, given that these other forces do not seem to be important in the short to intermediate run, inflation expectations are very important.

So my bottom line is that, although I see some downside risks on growth, I think the Greenbook scenario is a reasonable central tendency one, and I see some important upside risks on inflation.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. I would characterize where we are compared with the last meeting as that we have gone through a soft patch, which was more extensive than we expected. But the basic longer-term outlook is really the same as the one that we had the last time around. That is what is really relevant to our policy decisions because our policy decisions now do not affect the economy until a year or two down the road.

Looking at the issue of the risks, I was most worried at the last meeting about what was happening in business fixed investment, particularly because I did not really understand what was going on; and it is always the case that, when you have Knightian uncertainty, you get much more nervous. The numbers have come in a bit better on those grounds, so I am a little less worried about business fixed investment. But then we have had a downshift in housing, which again was unexpected. So when I put those things together, I think that we are in a situation of a fair amount of uncertainty. Maybe I am a little less worried about the uncertainty and the downside risk, although I think they are still there, only because in the housing case, from the point of view of the longer-run fundamentals, I do not see a big problem. It really is an inventory-correction issue, which we are trying to sort out. That is creating uncertainty, but it creates more uncertainty in the shorter term rather than in the longer term. Even though there is still uncertainty with the issue of business fixed investment, it may be a little bit less. So perhaps there is a slight skew on the downside in terms of my confidence intervals, but a little less than last time, if that gives me any comfort.

About the inflation issue, I am more optimistic than the Greenbook. I see inflation coming down to 2.1 percent by the end of 2007 and then to 2 percent and staying there thereafter. My reasoning here, I think, is familiar to you. I consider long-run inflation expectations to be a key driver of the inflation process. I see those numbers as around 2 percent, and unless we make a concerted effort to change inflation expectations, I think that is where they will stay. Also, I am confident that we will do the right thing to make sure that inflation expectations do not go up from there, and I think the markets have similar confidence in that regard.

When I look at the risks in terms of inflation, of most concern to me is the issue of what has happened to structural productivity. We have numbers coming in that we really cannot fully explain. Maybe there is just something a bit wrong with Okun's law, and productivity will revert back to it, and then we're okay. But maybe there is actually something more, that we have had such tight labor markets when, in fact, the economy has been growing at quite a slow pace. There is a real question about what this may mean. If structural productivity is actually downshifting more than we expect, that does create a serious inflation risk that we have to be very concerned about. On the other side is the issue about whether we really are in tight labor markets. You look at the numbers in terms of compensation and so forth, and they don't look too bad. This might tell us is that the NAIRU may be somewhat lower—again, if we even know exactly what the NAIRU concept means—which is the issue of Knightian uncertainty, not normal uncertainty. So in this context, the basic forecast outline that we have is actually a fairly benign one. I am willing to bet that it is probably the most reasonable forecast to have. I am pretty comfortable with it. But we will have to wait to see what kind of data come in. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Let me try to summarize the discussion around the table and take any comments on the summary, and then I would like to add just a few thoughts.

Broadly speaking, the outlook of most participants has not substantially changed since March. Housing remains weak, and it is the greatest source of downside risk. Whether the demand for housing has stabilized remains difficult to judge, in part because of subprime issues. It is also unclear whether builders will seek to return inventories to historical levels, and if so, at what rate. There is yet no indication of significant spillover from housing to other sectors, although that remains a risk. The downside risks to investment have moderated since the last meeting, although investment seems unlikely to be a strong driver of growth. The inventory cycle is now well advanced, and production is strengthening. Consumption growth seems likely to moderate, reflecting factors such as weakness in house prices and high energy prices. However, the labor market remains strong, particularly in the market for highly skilled workers. Incomes generated by the labor market, together with gains in the stock market and generally accommodative financial conditions, should provide some support for consumption going forward. Financial markets are priced for perfection, which implies some risks on that score. Foreign economies remain strong and should be a source of support, although some are undertaking monetary tightening. Overall, the economy is in a soft patch and will likely grow below trend for a while. Growth should return to potential later this year or in 2008, depending on the evolution of the housing market. The rate of potential growth remains hard to pin down. Several participants seem a bit more optimistic than the Greenbook on potential growth and the NAIRU, although there are risks.

Inflation has improved a bit, and most see continued but very slow moderation. However, there are upside risks to inflation, including compensation, the dollar, energy prices, and a slowing in productivity. Moreover, a rise in inflation from current levels would be costly, particularly if it involved unhinging inflation expectations. Vigilance on inflation must, therefore, be maintained. Overall the risks and uncertainties seem a bit less pronounced than at the last meeting, and

participants seemed relatively comfortable with the outlook. Although there are some potentially significant downside risks to output, arising particularly from the housing sector and the possible spillover to consumption, the group still appears to view a failure of inflation to moderate as expected to be the predominant risk to longer-term stability. Are there any comments or questions?

Hearing none, I will just add a few points. First, following President Yellen, I think that the tension between slow growth and a strong labor market remains central to understanding what's going on. Okun's law is supposed to work better than this. [Laughter] I looked at recent history. Over the past twenty years or so, there has been no exact parallel to what we are seeing now. There was a jobless recovery in '91-'93 in which unemployment remained high even though growth was picking up, and we had a midcycle slowdown in '95 and '96, which was relatively short and not very severe, in which the unemployment rate got temporarily ahead of growth. So there have been some deviations. Interestingly, after the 2001 recession, despite lots of talk about jobless recoveries, Okun's law worked pretty well. So we are in an unusual situation—instead of a jobless recovery, we have growthless job growth. [Laughter]

Interpreting this correctly is very important. The staff forecast essentially assumes that Okun's law will revert to historical tendency. I think that assumption is reasonable, particularly since the staff is not exceptionally optimistic about potential growth and, therefore, that particular source of error is moderated. That would suggest that labor hoarding is probably a good part of what is happening here. If there is one area in which labor hoarding appears to be significant, it would be construction, as President Yellen mentioned. I asked the staff to do a simple study of this relationship, to which Dave Stockton referred. Andrew Figura and Adam Looney of the Board's staff performed a regression analysis in which they regressed all construction employment against all investment in structures quarterly with lags going back to 1985. The reason to look at all

construction in terms of both employment and production is that there is a lot of substitutability between those two categories. That regression approach should also account for unmeasured labor, including undocumented workers and the like. In this analysis they found that employment is roughly proportional to construction activity, but with substantial lags, which again is somewhat surprising. Indeed, the model fits well through the fourth quarter of '06 but then begins to underpredict significantly in the first quarter of '07. If this model is correct, then given what is already in the pipeline in terms of reduced construction activity and then going on with the forecast in the Greenbook, we should begin to see fairly significant declines in construction employment on the order of 30,000 per month over the next year, which would be sufficient in itself, with all else being equal, to add 0.2 to 0.3 to the unemployment rate. So if labor hoarding explains the failure of Okun's law, then we may soon see some gradual rise in the unemployment rate, which would also be consistent with the view that the staff has taken that a good bit of the slowdown in productivity is cyclical.

It is actually fairly difficult to calculate the contribution of the construction sector to productivity because it involves not just construction workers but also upstream production of various kinds. But one estimate, which comes from discussions with the Council of Economic Advisers, had the implication of employment hoarding in construction being about  $\frac{1}{2}$  percentage point on productivity growth. We will see how that develops. Even though I believe, as does the staff, that we will see some softening in the labor market, I should say that the evidence is still quite tentative. We saw a bit of weakness in the last labor report, but unemployment insurance claims remain low, and we do not really see a significant indication.

The other major issue is the housing market. Again, as a number of people pointed out, this is an inventory-cycle problem. The two main determinants of an inventory cycle are (1) what the

level of final demand is and (2) how quickly you move to bring inventories back to normal. There does seem to have been some step-down in final demand over the past few months. Assuming that homebuilders would like to get not all the way to but significantly toward their last ten years' inventories by the end of 2008 implies fairly weak construction, not only in the second quarter but going into the third quarter as well. Only in the fourth quarter will we see a relatively minor subtraction from GDP. That's also relatively speculative, but residential construction does seem fairly likely to me to be more of a drag than we previously thought and to continue to be a problem into the third quarter.

There will also be a slowdown in consumption. We have been having rates near 4 percent, which is certainly not sustainable. We already see indications that consumption may be closer to 2 percent in the second quarter. I think the house-price effects are going to show up. Gasoline prices will have an effect. The labor market is strong, but it is going to slow a bit. So it looks to me as though underlying growth is roughly 2 percent and will be so for a couple of quarters to come. Notice in the thinking about the underlying case that there has been quite an asynchronicity between private domestic final demand and production lately. For example, for the second quarter we expect to see weaker private domestic final demand but probably a stronger GDP number because of rebounds in net exports and the like. But we should look past that—those are just quarter-to-quarter variations—and observe that growth is moderate, an observation that is supported by the sense that industrial production and manufacturing seem to be picking up. To summarize, I think that the notion of moderate growth with some uncertainty and with return toward potential later in the year or early next year is still probably about the right forecast.

On inflation, there's the famous stock market prediction that prices will fluctuate. That seems to be true also for inflation. I mentioned at the last meeting that the monthly standard

deviation in inflation numbers is about 0.08, and so between 0.1 and 0.3 there is not necessarily a whole lot of information. We have a few pieces of good news. I think vacancy rates are rising for both apartments and single-family homes. At some point we will begin to see better progress on owners' equivalent rent and shelter costs. Also, the quarterly average of medical cost increases was much more moderate than in the first two months, which suggests that maybe this risk is not as serious as it may have looked. However, as many people pointed out, there are a number of negatives, including the dollar, energy, food prices, commodity prices, and most importantly, the labor market. The compensation data remain quite mixed—in particular, the ECI, which was a very soft headline number. The 1.1 percent quarterly wage and salary number, or 3.6 percent for twelve months, is now more or less consistent with what we're seeing in average hourly earnings. If productivity falls below 2 percent, then we are beginning to get to a range in which unit labor costs will be putting pressure on inflation. So I am quite comfortable with the view expressed around the table that, although inflation looks to be stabilizing and perhaps falling slowly, there are significant risks to inflation and we should take those very seriously.

Very much a side point—I did have some interesting discussions with the staff about the role of the stock market in the forecast. This is not the staff's fault, but there is a sort of tension in how the stock market is treated. On the one hand, the stock market is assumed to grow at 6½ percent from the current level. On the other hand, the forecast has profit growth going essentially to zero by the third quarter but interest rates coming up. Those two things are a little hard to reconcile. The difficult problem is which way you should go to reconcile it. On the one hand, it could be that the forecast is right, and therefore the stock market will in fact be weaker; that will have implications for stability, for consumption, and so on. On the other hand, perhaps we should be taking information from the stock market in making our forecast. So it is a very difficult problem,

and I just wanted to point out the tension that we will have to see resolved over the next few quarters. One partial resolution is that, as has been noted, the stock market and the economy as a whole can be decoupled to some extent because of overseas profits. This is an interesting example of how financial globalization is creating stability for domestic consumption—you know, decoupling domestic consumption from domestic production. Again, we had a very good discussion with the staff about this issue, and I think it is just something we will need to think about going forward.

In summary, in the last meeting we felt that uncertainty had risen. There has been perhaps a slight moderation of those concerns at this point—a little less inflation risk, a little less growth risk. Nevertheless, the balance of risks with inflation being the greater still seems to me to be a reasonable approach. Let me now turn to Vincent to begin the policy go-round.

MR. REINHART.<sup>3</sup> Thank you, Mr. Chairman. I'll be referring to the materials that were passed around during the coffee break. For the past few years, the Committee has taken a "belt and suspenders" approach to providing guidance to financial markets by characterizing both the likely direction of interest rates and the risks to its dual objectives. In March, you loosened the belt a few notches by replacing the reference to "additional firming" with more-balanced language but retained the macroeconomic assessment that inflation risks were the more serious concern. The top left panel of your first exhibit provides one way to score the immediate market consequences of that change. The black and red bars, respectively, plot the changes in two- and ten-year Treasury yields in the one-and-a-quarter-hour window bracketing the 2:15 p.m. release of statements for the past two years. As some of you predicted, market participants saw particular significance in the March announcement that the Committee was apparently no longer presuming that its next action would be a firming, and two- and ten-year yields fell 10 and 5 basis points, respectively, the biggest moves in the sample shown.

After a bit of confusion about what the statement really meant, markets ultimately got the message, aided in part by Chairman Bernanke's testimony, your speeches, and the minutes. I take from this the sense that the wording of the statement is important [laughter], but that there are also other opportunities to provide a more-nuanced policy message. The message that market participants got both from you and from the incoming data, on net over the intermeeting period, is seen in the top right panel by the shift from the dotted red to the solid black line depicting the path of the

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<sup>3</sup> Material used by Mr. Reinhart is appended to this transcript (appendix 3).

expected federal funds rate. Futures quotes now imply a consensus that policy will be kept on hold today and at the June meeting but then will be eased  $\frac{3}{4}$  percentage point by the end of next year. This modest upward repricing of money market futures yields accompanied a reemergence of remarkably benign financial conditions, the subject of the three middle panels. Corporate bond spreads (at the left) and implied volatilities on equities and money market futures (in the middle) retraced much of the run-up of late February to end the period at relatively low levels by historical standards. Equity prices, at the right, gained 7 percent to reach new highs. As you'll see a little later, this addition to household wealth pushed up estimates of the equilibrium real federal funds rate and may importantly influence your thinking about near-term economic prospects.

In the bottom left panel, I trot out the usual suspects for why stock prices rose. First-quarter earnings reports were solid, so higher share value may just be a bet on rising domestic and foreign profits—the latter seeming especially more secure in light of the apparent vigor of the global economy. Our estimates of the equity premium—one of which is shown at the bottom right as the spread between the forward earnings-price ratio and the long-term real interest rate—narrowed a bit, suggesting that investors were more accepting of risk. Also, investors may see less risk, as in answer C. Potentially bad things that seemed palpable as the subprime market melted down did not go bump in the night—that is, downside risks to the outlook appeared to ease. What is the right answer to this multiple choice test? I think (D), all of the above, in that the world's growth prospects seem a little more assured and, as a result, investors see fewer risks and are more willing to take them on.

That backdrop leads naturally to a discussion of policy choices, which begins by examining the case for alternative B, which is in your next exhibit. The last time that you sat at this table to consider the setting of policy, you chose to keep the federal funds rate at  $5\frac{1}{4}$  percent. The way the staff has filtered the flow of information since March has produced only minor changes to their outlook for real GDP growth, the top left panel, and core PCE inflation, the top right panel. So, if you were content in March, would you not be so in May? Keeping the nominal funds rate at  $5\frac{1}{4}$  percent is consistent, as plotted in the middle panel, with the real federal funds rate, the solid black line, rising to continue to match the Greenbook-consistent measure of its equilibrium value, the dotted green line. If you believe that framework, this stance of policy should return the level of output to its potential within three years. Some of you might argue that such an outcome is not good enough. With core PCE inflation lingering above 2 percent, a more forceful working down of inflation—perhaps even at the cost of creating some slack—may be required for acceptable economic performance. While that may be a relevant consideration, risk-management issues may tug in the opposite direction. In particular, and as shown by the solid line in the bottom panel, the staff forecast puts real GDP growth in the neighborhood of 2 percent for the next six quarters. Times in which economic growth has been at or has dipped below 2 percent—the dashed horizontal line—have often been followed by recession—the shaded regions. Concern that the economy would be flying close to stall speed may stay your hand from dealing more aggressively with inflation.

Indeed, concerns about growth may incline you to believe that your next policy action will be an easing—the subject of the left column of charts in exhibit 3. As has been true for some time, the case for alternative A rests importantly on your assessment of the housing market. New-home sales, the solid black line in the middle panel, have taken another step down, further elevating the months' supply of unsold new homes, the dotted red line. This inventory correction will impose a drag on residential investment for some time—and could get worse if the availability of funds tightens some more in light of the woes in the subprime mortgage market. You also might now harbor doubts that businesses will step up their spending, which would otherwise have cushioned any slowing in the growth of aggregate demand. While the latest readings on orders and on shipments of capital goods, plotted as the solid black and dotted red lines, respectively, in the bottom left panel, were encouraging, you might dismiss those as one month's noisy signal around a downward-pointing trend. In addition, you might see financial markets as ripe to correct, once investors come to appreciate that earnings prospects are as tepid as in the Greenbook forecast.

But risks to economic growth are not the Committee's sole concerns. In March you identified the failure of inflation to moderate from its current elevated level to be the predominant concern. The case for alternative C, presented in the right panels, probably hinges on the view that inflation is not clearly on a downward trend, seen in the middle panel by inflation as measured by the core PCE price index (the solid black line) and the market-based core PCE index (the dotted red line). In addition, the outlook for inflation may now be seen as less favorable than in March, given the run-up in the prices of oil and other commodities. As shown in the bottom right panel, futures-market participants have revised up their forecasts for the prices of these items well into the future. If the pace of moderation of core inflation turns out to be even slower than previously anticipated, you might be concerned that long-run inflation expectations will drift up, making for difficult policy choices going forward. The prevailing expectations of inaction, shaped in part by official comments, may take alternatives A and C off the table for today. But any inclination to favor the arguments in either the right or the left columns should influence your choice of language in the statement, the subject of your last exhibit. This exhibit is just table 1 repeated from the Bluebook with no emendation.

I note that, in the discussion of communications, the Committee thus far has been reluctant to specify an inflation goal consistent with its dual mandate. However, by describing current inflation as "somewhat elevated," as was the case in March, you are implicitly characterizing the upper limit of your tolerance for inflation, just as you delimited its lower bound in the summer of 2003 with talk of "unwelcome disinflation." Market participants will read much into your choice of words when the time comes to change that characterization. So, at some point, you will have to come to terms with your preferred specification of your inflation goal, either directly through deliberations on communication policy or indirectly through the wording of the statement. That concludes my prepared remarks.

CHAIRMAN BERNANKE. Thank you. Are there questions for Vincent? If not, we can begin the policy go-round.

MR. POOLE. I guess by default I will start. First of all, I favor alternative B, both the language and the unchanged federal funds target. Let me make a couple of comments about market liquidity. First, liquidity is not reduced at all by deals. Deals simply transfer the funds from the buyers to the sellers, who then have to figure out what to do with all that cash. Deals are probably being driven at least in part by very narrow risk spreads. But my sense is that so far these spreads are consistent with actual losses in the markets. Obviously, if that situation continues, then risk spreads should remain low, and we should continue to have a very active amount of deal making. Some of the returns from the deals really feed into good productivity performance because part of the purpose of these deals is to take over companies that are not performing well and to eliminate marginally profitable or unprofitable operations and that is really good for productivity. To the extent that the deals are simply increasing leverage—sort of financial engineering—then that does not do anything for productivity. It does increase risk and vulnerability should the economy perform other than anticipated. We cannot really do anything about that situation except to avoid creating surprises ourselves; it is really, on the whole, beyond our control. Governor Kohn talked about standard errors, and I must say that, when it comes to standard errors, I am very much an indexer and not a market timer. [Laughter] It is easy to fool yourself just as in investment policy, but that is where I come out there.

On the issue of the inflation target—and I am glad that we are closing in on this topic—I honestly do not believe that we can credibly be satisfied with an inflation forecast for 2009, that far out, of 2 percent and at the same time continue to talk about a comfort zone of 1 to 2. That does not seem to me to be internally consistent because we cannot control inflation to 0.1 percentage point.

So either we have to decide that our true target is something like 1½ plus or minus ½ as an issue for control errors and other considerations, or we need to start being explicit about a comfort zone of 1½ to 2½. I am worried about the latter approach because it runs the risk of raising market expectations and of unhinging expectations. Expectations have been very solidly held. If we get into a situation in which, through inevitable things that happen that we cannot control, the inflation rate were to run consistently at, let's say for the sake of argument, 2½ instead of around 2, then those market expectations might not be so well entrenched at 2½ as a consequence of having willingly and openly or by default—by revealed preference, if you will—moved effectively to raise the comfort zone. I am very much a hardliner on this. I think that we ought to continue with a comfort zone of 1 to 2, and we ought to think about the inflation target as being 1½ plus or minus a half. Thank you.

CHAIRMAN BERNANKE. Thank you. President Poole's comments remind me that I did have a question, Vincent. It is, What do you think is the effect of the term "on balance" in the inflation paragraph?

MR. REINHART. We added the term "on balance" in drafting the Bluebook for both the time-series and the cross-sectional perspectives. That is, first, from the time-series perspective you are not looking at just one monthly number. You may be doing as complicated an analysis as President Stern in looking at three-, six-, and twelve-month changes. Second, it has a cross-sectional aspect to it. You are not just focused on the one number of core PCE, but you're taking in the whole suite of price indexes.

CHAIRMAN BERNANKE. Well, let's just say core inflation, so it wouldn't be every inflation measure.

MR. REINHART. Yes, but you are not hanging your hat necessarily on the PCE versus the CPI. The thought is that the insertion of that language means that you're tending to smooth through recent observations, and we took it as something that would be on balance—[laughter] that phrase comes very natural to us, too—a little more hawkish.

VICE CHAIRMAN GEITHNER. Sorry? Which was a little more?

MR. REINHART. To take it out would be a little more hawkish.

VICE CHAIRMAN GEITHNER. It would be a more hawkish signal than a statement with “on balance”?

CHAIRMAN BERNANKE. I agree with that last statement.

VICE CHAIRMAN GEITHNER. Mr. Chairman. In the same vein, may I just ask a question about the likely conclusion that people would draw from the change in the second section? It has the virtue of truth. [Laughter] You could interpret it, relative to March, as a softer characterization of the recent news. It goes in a slightly different direction from the center-of-gravity of this discussion, which is to say that indicators have actually been mixed. They are sometimes a little softer or sometimes a little stronger, but we think there is maybe a slightly thinner adverse tail in the growth outcome than we had thought in March. I am not particularly troubled by that. But, Vince, do you think that this would be the plausible reading by the market to the change? How would they interpret the intent of the change in section 2?

MR. REINHART. That it was a recognition of the incoming information. I think an important change is also to take out the “to continue to expand” and leave it as just “to expand” because the first quarter did not have moderate economic growth. So that part says that you are acknowledging the most recent numbers. Again, the first clause is basically acknowledging that the first part of the year, not just the first quarter, will potentially be kind of slow. So more than

anything it says that the Committee is looking through this soft patch, without using the phrase “soft patch.”

MR. FISHER. Mr. Chairman, may I ask a question?

CHAIRMAN BERNANKE. Certainly.

MR. FISHER. Are you advocating that, if we use the text as written in section 3 of alternative B, we would still keep the full wording from section 4 from last time?

MR. REINHART. The wording of section 4 would be unchanged, yes.

MR. FISHER. That may mitigate some of those concerns you have.

MR. REINHART. Yes.

CHAIRMAN BERNANKE. Since we are bringing these suggestions out early, one thing that you could do in section 2, the second sentence, is simply make an assertion about moderate growth. One could say, “Overall, however, recent indicators suggest that the economy seems likely to expand . . .,” suggesting that the news recently has been somewhat more positive. That is just a thought. Let’s go to President Stern.

MR. STERN. Thank you, Mr. Chairman. Well, earlier in talking about the economy I said that I thought the extended outlook was reasonably favorable in terms of prospects for growth and that I also expected a modest diminution in core inflation, assuming that policy would be sustained approximately where it is. That leads me directly to favoring alternative B as the policy choice. Putting it the other way around, I do not see compelling reasons to make a change at this point, so I think we should stay where we are.

As far as language is concerned, the bulk of the language under alternative B is fine with me. But I do have one suggestion, which is that we replace the second sentence in section 3, alternative B, which talks about inflation, with the second sentence in section 3, alternative C, which

emphasizes uncertainty. I advocate that for several reasons, but really they boil down to my thinking that it better describes the situation in which we find ourselves. So let me just elaborate a little. We know that the NAIRU is at best an imprecise concept. We know that accurate measurement of productivity is difficult and that, therefore, so is estimation of potential real GDP, the output gap, and so on and so forth. Indeed, simulations in the Greenbook address those two issues precisely, and there has been a fair amount of discussion recently at this meeting about uncertainty about the NAIRU and about productivity and so on. That leads me to my suggestion. I would also observe that it is certainly not far-fetched to imagine—although this is not my forecast—that the unemployment rate or some other measure of slack may move up for a time while inflation remains stubbornly where it is or even increases a touch. So all of that leads me to favor the language from alternative C for that one sentence.

CHAIRMAN BERNANKE. Governor Kohn.

MR. KOHN. President Stern, would you add the same words on the output side? Do you think it's worth emphasizing uncertainty about inflation without also emphasizing the uncertainty about output? Although a lot of people have said it has narrowed relative to last time, a lot of people have also said that the housing situation is very uncertain.

MR. STERN. I haven't thought about that. But if you want to say that the economy seems likely to expand, we could, I suppose, soften that a bit to emphasize uncertainty there as well, although my sense of things is that people do, in fact, expect moderate growth going forward.

CHAIRMAN BERNANKE. Intervention, President Fisher?

MR. FISHER. No, sir. I just want to comment.

CHAIRMAN BERNANKE. Why don't you go ahead.

MR. FISHER. Well, again, I am probably the most bearish in terms of a short-term forecast on GDP growth and have very asymmetric confidence bands, which take into account even slower growth than that. Having listened to the conversation at the table and keying off the word “hawkish” that Vince used, I want to be owlish on growth in terms of listening to President Stern’s admonition, and I don’t want to be a pigeon on inflation—just to kill the aviary context here.

[Laughter] So I would advocate alternative B. I don’t believe that we should change the rate. I like very much the suggestion that President Stern just made about inflation.

The only thing in your summary list, Mr. Chairman, that I did not hear and that I think is an issue is the behavioral pattern of private-sector leaders who were trying to figure out how to preserve their margins; therefore, I think we will have more sustained price “instincts” than I would otherwise see from the current data. I think the second sentence in alternative C captures that uncertainty, and I agree with President Stern. Finally, as always, I would suggest that we add the word “global” before “resource utilization.” Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Noted. Thank you.

VICE CHAIRMAN GEITHNER. Mr. Chairman, may I ask just a clarifying question on this discussion?

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Don raised the obvious question, which is whether we want to introduce the characterization of uncertainty on one piece of our outlook but not the other. But, Gary, did you suggest that uncertainty about the inflation forecast is greater today than it was in March?

MR. STERN. Not for me personally. But as I thought more about this and listened to some of the conversation, the uncertainty seemed to be at least as great as it was in March. In fact, the

Greenbook marked up core inflation a touch. That doesn't lead directly into greater uncertainty, but it is not the direction in which I would have gone if I were changing the inflation forecast.

VICE CHAIRMAN GEITHNER. But is your rationale mostly about greater uncertainty, or is it mostly a continued aversion to implicit reference to the output gap as being a significant force?

MR. STERN. Both.

CHAIRMAN BERNANKE. I would like to interject. We do have to think about the time-series nature of the statement, and I am concerned, given that our last inflation reading was very good and reduced some of the anxiety that we were feeling in the last meeting, that there will be a lot of attempts to interpret what we meant by uncertainty. At this point, are we feeling that there is an increase in uncertainty and that we have lost confidence in this projection? I think that we have to think very seriously, not just about the sentence, which is very reasonable on its face, but also about what extent the change from the last statement will be overinterpreted.

MR. STERN. I agree with that comment 100 percent, although I do think that is an issue we are going to confront if and when we ever make that change, quite honestly.

MR. FISHER. May I make an intervention, Mr. Chairman?

CHAIRMAN BERNANKE. Yes.

MR. FISHER. If you do use that sentence, then you might be able to get rid of the first sentence in section 4 that you used previously.

CHAIRMAN BERNANKE. The core inflation sentence? Which one?

MR. FISHER. "In these circumstances, the Committee's predominant ... concern . . ."

SEVERAL. No.

MR. FISHER. I am not arguing that you include both but that you could trade one off against the other.

CHAIRMAN BERNANKE. Are there any interventions? If not, President Minehan.

MS. MINEHAN. Gosh, as usual the state of play here has gotten confused—for me, anyway. First of all, the thing I am least confused about is the policy recommendation. I do not think we should do anything at this time. I think we should stay the course at  $5\frac{1}{4}$ . I am very much in favor of alternative B.

Second, I want to comment about what Vince said about the reaction to our statement the last time, in large part because I found that the people who talked to me about it over the past several weeks felt that our statement communication was somehow murkier than usual, if that is possible. Personally, I felt that we were very clear in that statement—we saw that there was more two-sided risk—and ultimately the market has come around to that belief. I guess I have come to the view that it is not a bad thing that the market reacted a bit more strongly. We probably should have anticipated that, and I think I even commented about it at the last meeting—that when you make a change to open a two-way possibility for policy a little more explicitly, it will have a bigger impact on the overall market.

Third, with regard to the discussion about the language in alternative B, I was of the opinion that in terms of growth we have a certain set of risks coming from the housing market and rising energy and gasoline prices, which to some extent was offset by continued strength in employment, the financial market adding to household wealth, the growth around the rest of the world, some brighter picture from business investment spending, and so forth. So I look at the growth part of this as a bit more balanced and somewhat less uncertain than last time but at the inflation part as being more uncertain. So I was attracted both to President Stern's recommendation and even to a recommendation that would replace section 3 of alternative B with section 3 of alternative C. But I think about the Chairman's most recent comments about how strongly the market might react to

that, what it might say about what has been a nuanced discussion here about inflation. We all expect inflation—we in Boston somewhat less than the rest of you—to moderate over the next year or year and a half to something that is within what some people have called their comfort zone. I am a little worried that we might send a message of more concern than we might have intended from replacing that language, although I agree with President Stern. I think the language of alternative C, particularly with regard to uncertainty, is somewhat more reflective of what we talked around the table than the existing language of section 3.

Finally, I may be kidding myself here, but I have been taking the language in section 3 as saying not so much that we're committed to a comfort zone of between 1 and 2, although I take President Poole's comments on this seriously, but rather that the dynamics of inflation had the risk that inflation would accelerate rather than decelerate and that is what we were concerned about. Again, that is my personal reading on this because that is the context in which I think about concerns about inflation at this time. I would agree with President Poole that there is a way in which you can read this that is gradually pushing us into giving a target and a target range, and that may be where everybody wants to go here. I do not know, but I think there is a little risk around a specific number, as I have said many times. I would agree with Governor Kohn and his comments about wondering whether we really want to push inflation just for the sheer sake of pushing it to below 2 or, rather, waiting for the ability to move opportunistically at some point.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I support the recommendation embodied by alternative B. The Committee last time wanted to introduce a little more flexibility into the statement while not sending a message that our resolve about achieving price stability had changed. It took a while for that message to get through, but it did. Since not much has changed in the way

the economy is unfolding relative to our expectations since the last meeting, I would prefer to make only the essential adjustments to the statement, such as acknowledging the recent slowing in economic activity. In the spirit of making only minimal changes, I would not add the clause “on balance” to the sentence on core inflation. We had the benefit of asking what we were trying to convey with that phrase and heard Vincent’s comments about time-series and cross-sectional perspectives, but the markets aren’t going to have the benefit of that explanation until they get the minutes. I am also concerned that introducing the language about uncertainty around inflation is going to have the markets trying to interpret what we are trying to say. They have a lower path to the fed funds rate built into their expectations, and I think they have been looking for language to help support that position; our saying that we are uncertain about inflation may appear to them as a bit dovish rather than hawkish. So I would just rather keep things where they are today, with very few changes to our language. I support alternative B without “on balance,” but that is obviously not a show stopper. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Like everyone else, I support the policy recommendation of alternative B, keeping the fed funds rate unchanged. I do think that has the best odds of helping the economy meet our dual objectives of maximum employment and stable prices. Financial conditions right now, as several people have remarked, are really quite supportive of growth, particularly in the business sector, but I think that is necessary to offset some of the drag from housing and from business and household caution. The recent indicators, it seems to me, have still a bit of a mixed character. We have one month of strength in capital spending, and we have some industrial production and ISM data, but consumption has definitely slowed down. So to my mind there is still considerable uncertainty, even if it is less than last time, around the output path.

Given that I think things are close to where they were before, I wouldn't make many changes to the wording from last time. I am comfortable with section 2 on economic growth and "expand at a moderate pace over coming quarters," unless we add something about uncertainty to the inflation piece, and then I would want to add uncertainty to the other. But I do not think we ought to add the uncertainty language to inflation. I think the combination of that and the "predominant" language, as President Fisher was implicitly pointing out, will send a much more concerned message about inflation. It will say that our concerns about inflation have increased since last time—I really think it would be interpreted that way. At some cost, we obtained some flexibility in how we are characterizing the situation and in our policy expectations by the changes we made last time to the final section. I would keep that final section the same, and I would not do something to undo that, which would be to combine the uncertainty language on inflation and the predominant risk language. I think that the world would see the Federal Reserve as being much more worried about inflation than it was last time, even though the data have been a little better.

On section 3, "core inflation remains somewhat elevated on balance"—one question I asked myself was, if I had a 2 percent target and the latest number was 2.1, should I be much concerned about that, or would I be comfortable with the sentence. I think I am okay with the sentence for a couple of reasons. I'll come to the "on balance" in a second. One reason is that the latest data on core PCE prices are heavily influenced by those nonmarket components that I've denigrated at this table before, and we can be consistent there. The year-over-year CPI still shows some acceleration, much more acceleration than PCE. The market-based PCE shows some acceleration. So the rate is still higher than I am comfortable with, especially when I discount the nonmarket part. The CPI is still pretty high, and I completely agree that inflation is our predominant concern. So I think saying that core inflation remains somewhat elevated is fine with me. President Poole said something

about that “we” as a Committee continue with our comfort zone of 1 to 2 percent. For the sake of the transcript, I want to make it clear that the Committee has never chosen such a comfort zone. Several individuals have, and I agree with both President Poole and Vincent that this could get awkward soon—but not yet—and we need to think about it. The Committee does not have a comfort zone. With regard to the phrase “on balance,” I could live with the sentence either way. Unfortunately it’s an ambiguous phrase. I’m not sure how people will interpret it. Was the thought that it would be more hawkish to take it out? I didn’t follow the dialogue between Vincent and Vice Chairman Geithner on what you thought the effect would be of doing the section without “on balance.”

MR. REINHART. The theory was that you were smoothing through recent data so that, if you got another good reading on core inflation, as you did last month, you wouldn’t necessarily weight it as much.

MR. DUDLEY. Don, you could take “on balance” as acknowledging last month’s data, and if you take “on balance” out, you’re not acknowledging last month’s data as much.

MR. REINHART. May I also just ask a question? In President Stern’s formulation, you would take the second sentence from alternative C and not make any reference to resource slack? So I would actually take that as markets reading that you have decided to totally discount the current pressures on employment rather than increasing your weight on inflation uncertainty. I took this as an invitation to say disregard employment—you are not worried about slack as much, and you are just asserting that inflation moderates.

MR. KOHN. I hadn’t thought about that, I confess. That makes me even more uncomfortable.

MR. REINHART. I would view that as quite a dovish statement.

MR. STERN. Well, I viewed it as a neutral statement. [Laughter]

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. On the other side, we are anticipating a slowdown in employment growth.

So then, the markets would look back to this and say, "Aha, the unemployment rate is rising—the Fed is about to ease." The question is whether this is a good time to get that notion out. I don't feel very strongly one way or the other, but I think there is a lot to be said for leaving it alone, given all the ambiguities here. But basically I'm supportive of President Stern's recommendation.

MR. REINHART. I would note that Bloomberg today had a linguist evaluate previous statements, and he basically concluded that the language was pretty hopeless. [Laughter]

SPEAKER[?]. Who was this linguist?

MR. REINHART. In fact, it was the chief editor of the *American Heritage Dictionary*.

MR. MOSKOW. Can we hire him as a consultant? [Laughter]

MR. KROZNER. A meteorologist and a linguist.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Anticipating that a linguist will be reading this afterward, let me say that I strongly support alternative B. Since I'm assuming that the language is what we're talking about, I support the current language even though there have been many suggestions for modifications. I am not inclined to make any suggestions myself or to accept any of the others that have been put on the table unless you, as the Chairman, decide to modify this language somewhat.

I have a couple of comments, though. Governor Kohn mentioned that we would have a long period in which we experience below-trend growth; but from my perspective, that's what we intend. We have had a period of modestly tight policy, and therefore we should expect somewhat below-trend growth with the objective of bringing in our inflation numbers. We are right on track

with that, and that is where we ought to be staying. I am very comfortable with this modestly tight policy. Over time it should systematically bring inflation down. I agree, again, with Governor Kohn's earlier comment that we can do it in this way with minimal cost to the economy, which is our objective: to bring inflation down and to do it in the least costly way possible. So we need to stick with this policy as we have defined it here. I would also point out, just for the record, that if you want to make sure that we are not getting tied up into targets, as I have said before and will say again today, that I am not targeting on core PCE. I much prefer core CPI—it is more easily understood. If that is the case, then the 2 percent number, if we have to talk about a number, makes a lot more sense. We can get this any way we want, but the point is that we need to bring the inflation numbers down systematically, and we are not yet where I think most of us in this room agree we should be. So where we are with the policy under alternative B is, I think, a very good choice for us. I will end with that.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. As I listen to the comments around the table, I am of two minds. One, and I have said this before, maybe we ought to be in the business of changing the statement a lot more frequently to get out of some of our traps of time-series language. Two, having said that, though, I think, as I indicated earlier, that alternative B is the correct one. We ought to hold the fed funds rate where it is. We are about in the right place for now. There is some question mark going forward in terms of how things evolve and where we want to be, but for now I am certainly comfortable where we are. If growth returns to trend more rapidly than the Greenbook projects, then we might ask ourselves other questions; but I don't think we're there yet. Acknowledging Governor Kohn's comments, I have to confess that I think that Bill's comments—indeed, taken off Vince's—are appropriate. We need to align ourselves here better in terms of

where we're going and what we're doing. As we get closer, articulating more precisely where we are, at least among ourselves, becomes even more critical. Aligning our objectives with market expectations and figuring out how we get those things into alignment is a critical task that we face, and I just would like to reinforce that.

In terms of wording, I could live perfectly well with alternative B as written. I have a lot of sympathy for President Stern's statements. I would like to simplify our statements about inflation. In fact, if people are troubled by the notion of uncertainty, I would go so far as to stop after "inflation pressure seemed likely to moderate over time." I recognize that is probably not the consensus view. As for the rest, I kind of liked the Chairman's suggestion—I think it was his—on some of the language in section 2. In some ways, if we don't want to convey much to the markets at this point, changing as little as possible seems to make sense, and I would be supportive of that. In fact, we could take the March statement in section 2 and leave it exactly as it is except to take out "to continue." But the Chairman's suggestion about mixed signals would be fine with me, too. So I'm pretty flexible at this point. The real nut to crack will be coming up over the next quarter or two, when we will face some more difficult choices, I believe. So I'll end with that.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Policy should be straightforward today. We're waiting out a lull in growth while inflation is unacceptably high, at least to most of us. When the downside risks have sufficiently diminished, I'm presuming we're going to want to take action to bring inflation down; but in the meantime, we are on the sidelines obviously with regard to rates.

Coming into this I had thought the statement was going to be a pretty straightforward matter as well. Evidently not. Markets finally figured out what we meant in the last statement. I think you are right, Mr. Chairman, in your autoregressive model of the statement language. The markets do a

Kalman filter on whatever we issue and attach great importance to whatever we change. I do not think much has changed about the outlook to warrant significant changes in language, although I'd be sympathetic to taking out "on balance" on the theory that it is a hawkish move in general.

[Laughter] About what Gary said, I am really sympathetic to the notion of changing the way we refer to the relationship between resource utilization and inflation in our statements. I say that because the best mainstream understanding is that resource utilization and inflation are the joint outcome of economic decisions given our actions and given what we're expected to do. One can talk about resource utilization affecting inflation. One can just as well talk about moderating inflation keeping resource utilization high. There is really no superiority to one characterization or the other. So the idea that a sort of independent thing is wagging around there driving inflation, rather than both of them being the result of our actions, is an area in which we could improve the public's understanding of our understanding of how monetary policy affects the economy.

I would also like to endorse the spirit of President Poole's remarks about inflation and what we want. You know, about this notion of opportunism or the idea of an interim target, I think again about my brother-in-law sitting down in front of retirement planning software. I guess I would be left telling him, "Well, you should put in between 1 and 2," depending on when we decide to take the opportunity to reduce inflation below 2 percent. I do not think that's satisfactory. I think we can do better. When we choose an objective, we should view it as a once-and-for-all thing. Part of that reflects a sense that, well, if transition costs are something we are going to describe as keeping us from going to where we now think we ought to be ultimately, what if shocks bump us up to  $2\frac{3}{4}$  or 3 percent? Are we going to say the same thing then? I mean, it is inviting people to think that, and it is just sort of painting ourselves into a corner. Governor Kohn, you referred to the net welfare costs of 2 versus  $1\frac{1}{2}$  percent inflation. If you do the optimal-policy calculation, the only thing that

governs where you get in the long run, no matter how long it takes, is that net welfare calculation.

So that's what should govern where we choose to set our objective, not whether we think transition costs are going to be high now or not. That concludes my remarks, Mr. Chairman.

CHAIRMAN BERNANKE. I think your point about joint causality, joint endogeneity, of utilization and inflation is a good one. I have tried to make that point in testimony when I talk about aggregate demand being strong and having effects both on inflation and on resource utilization. We can think about this. It is a little hard to capture complex models in these statements, but it is certainly a point well taken. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I support the Bluebook's alternative B, both the policy and the language as it stands. With respect to the language, I strongly support the view that you, Governor Kohn, and others expressed—that a change today would be a mistake, given the significance that the markets would attach to it. I think the language is completely acceptable and we should stick with it. If we were to move, I wouldn't have a problem with the language in C about inflation and uncertainty, but I would also want to add something about uncertainty with respect to growth, and I see no need to make this change today. It seems to me that we do need considerable flexibility at this point to respond to emerging data. The intermeeting developments have strengthened the case for a soft landing, but there is significant risk on both sides with respect to inflation and growth. I'm still comfortable stating that the predominant policy concern is the risk that inflation will fail to moderate as expected. I am worried about labor markets that remain fairly tight, oil and commodity prices that are higher, and the dollar, which has fallen. At the same time, the recent favorable inflation data have reinforced my view that a substantial part of the uptick in inflation last year was transitory. I think that the discussion we have had so far reinforces the point that going forward we are going to have trouble crafting policy and a statement if we don't clarify—

at least within the Committee, if not publicly—what our ultimate inflation objective is. I'm not going to weigh in again at this point on the merits, but it is obvious that we will have increasing difficulty. I am happy today to say that core inflation remains “somewhat elevated on balance.” But if we get more readings of core PCE inflation that are in the neighborhood of 2 percent and they continue, we really will have to revisit the debate about what we want to achieve and how we can reflect that decision in our statement.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. If you step back from the discussion and just think about the policy position, we're in a difficult position because inflation continues to run higher than most of us think is appropriate but economic activity seems to be in a soft patch, as you said in your summary of the comments, Mr. Chairman. I think alternative B—keeping the fed funds rate at 5¼ percent and the language—is the appropriate one for today. If we were to take the suggestion of using the sentence from alternative C about considerable uncertainty surrounding the inflation judgment, how would the markets interpret this change, regardless of how we meant it? I think the markets would immediately interpret it as less emphasis on inflation from our standpoint. I think they would also say, “Well, there's now more uncertainty, or the FOMC sees more uncertainty today about inflation than it did at the last meeting.” I don't think either statement is accurate.

If we delete the phrase “high level of resource utilization,” they will say that we're less concerned about high levels of resource utilization than we were before. We've had this phrase in the statement for a long time. At some point we want to take it out, but when we do the change to the statement would be very significant. I wouldn't do it until we felt that, in the context of looking at the overall statement in a very careful way, making that change had some

major benefit. There is a virtue in making few changes in the statement unless we have a specific objective in mind or a specific message. So I would strongly oppose making that change in the statement. On the phrase “on balance,” I guess I was persuaded by Vincent’s description that this helps us give the impression that we’re smoothing through the recent data. So on balance, I would keep “on balance.” [Laughter]

CHAIRMAN BERNANKE. Thank you.

MS. MINEHAN. Mr. Chairman?

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. I realize that when I finished my comments I was never really clear about language. After sorting through all the comments that people have made and my thoughts about those comments, I am perfectly happy with alternative B as it is written and with the “on balance” language. I do want to say, though, that if we had replaced the language in section 3 with that about inflation pressures and uncertainty, the juxtaposition of the sentence “Inflation pressures seem likely to moderate over time, but considerable uncertainty surrounds that judgment” indicates that the uncertainty relates to “moderate over time,” and it’s clear that the uncertainty is about inflation being higher rather than lower. That statement would be somewhat more hawkish and, in fact, more reflective of where people’s balance of concern was. I am totally in agreement that there is no need to change this language right now, but I did want to weigh in a bit there.

CHAIRMAN BERNANKE. President Lockhart.

MR. LOCKHART. Well, I, too, support alternative B, and simple logic: We haven’t arrived at the optimal picture yet. Output growth is slowing, inflation is still elevated, and there is a fair amount of uncertainty. Some of us focused on uncertainty in the inflation picture, and

some on both sides. I think the situation merits a patient approach at this juncture; we should give it some more time. Regarding the language, not being well schooled in the literary style of the FOMC, I, too, focused on the “on balance” phrase, thinking that it injected maybe a hint of equivocation. I understand the logic. I believe what I heard President Yellen saying is that we have to think in a two-step process here—that is, if you put it in and then the next time around take it out, how do the markets react? So for what it’s worth, I focus on that, not quite knowing how to process the “on balance” language. Otherwise, I’m going to abstain from the language debates here until I have a little more experience.

VICE CHAIRMAN GEITHNER. I don’t know that it will help. [Laughter]

CHAIRMAN BERNANKE. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. I favor alternative B and think that there is a very heavy presumption against our changing the language much from our March statement. From all that I’ve heard today, I don’t think we have even convinced ourselves that we have matched that presumption or overcome that burden of persuasion. So though I’ve had some sympathy in isolation to the Stern suggestion, I don’t think this is the right time to take it up in light of our experience of the last statement. For several days, we had the markets focused on us rather than on the data. What you, Mr. Chairman, and others have done over the most recent period is to try to get the markets to be dependent on the data rather than to look at us. These changes in language—whether the Stern amendment or something else at this point—do just the reverse of that. I don’t think this is a good time for nuance in the markets, and so I don’t think our substitution there would be good. I don’t think we can agree, even among ourselves, what the Stern amendment would do—whether it’s hawkish or dovish; and if we can’t, I hardly think

it's a good prescription for us to send it out to the markets and have them figure it out for us.

[Laughter]

So I strongly favor alternative B. I think the markets will read the change in section 2—where we say, “Economic growth slowed in the first part of this year”—as “We believe April as well was quite mediocre.” I think that’s what it means. That’s what we believe, and so that change is justified by the facts. In terms of the “on balance” language in section 3, I could live either way, but I don’t see a compelling reason for adding “on balance.” I think the markets still want to see in us a reflection of what they believe. They believe that we’re cutting, that our credibility on inflation is real, but that we’re just being a little cute now. I wouldn’t want to give them an excuse to say that we’ve taken our foot off the accelerator, that we’re less concerned about inflation. It is just one data point, so I’d prefer to leave it without “on balance” as it was previously. That’s it. Thank you.

CHAIRMAN BERNANKE. I think you mean the brake. [Laughter] Anyway, thank you. Governor Kroszner.

MR. KROZNER. As everyone else has said, there haven’t been enough data to lead us to change our view, and the policy should remain where it is. Alternative B is the right way to go, and—I agree with Governor Kohn—it is the best way to meet our dual objectives. The statement from last time bought us some flexibility, although at some cost—it left a bit of confusion in the market, which we’ve clarified. It is important for us to maintain that flexibility, and so in altering the statement we should think about that. In the first part of section 2, we do have to acknowledge that growth slowed in the first part of this year. It is important to make that change. But because we have made that change, the Chairman’s suggestion seems quite reasonable to me—rather than saying “nevertheless,” just assert that “recent indicators suggest

that the economy seems likely to expand at a moderate pace over coming quarters.” I think the Chairman had suggested starting that sentence with “overall.” If people like the phrase “on balance,” we can say “on balance recent indicators suggest that . . .” [laughter] depending on whether we choose to use the phrase “on balance” in the next sentence. On the next sentence, I’m open about whether we use “on balance,” but I would, on balance, go for taking it out because I don’t see the particular benefit at this point of adding in that qualification. In some sense it takes away a bit of our flexibility rather than adding to it. I’m trying to think about the most likely scenarios going forward, and it’s more likely that we might want to remove or alter that phrase than keep it. So from our time-series perspective going forward, it might leave us a little more flexibility not to put it in, but I don’t have a very strong view on that.

As you can see from my comments, I think that we shouldn’t be changing things much. In principle, I’m sympathetic to Gary’s proposal, but this is not the right time to make that change. There is a question about the interpretation of “high resource utilization.” If we take our central tendency discussion, we’re going to see growth around 2 percent or so, clearly below potential. That doesn’t suggest a high level of resource utilization. But given what the Chairman mentioned about likely changes in employment growth, by the time we have our next meeting we may be adding 0.1 or 0.2 percentage point to the unemployment rate, and so it would be 0.3 percentage point higher than we were quite recently, although it’s still broadly at a relatively low level. The change would bring us back to a higher level than we’ve seen in quite a few months. We should just be mindful of that. I’m not suggesting that we take it out, but we will have to think about how to change it because the high level of resource utilization is not going to be there by traditional measures. But most of us think that there is still a lot of potential to sustain those pressures, which may not just be the high level of resource utilization. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. Obviously, I support alternative B. It seems from a policy perspective that our outlook hasn't really changed. We want to change as little as possible in our statement. My SAT scores in English were much lower than my SAT scores in math, so I'm not going to comment on the issue of the phrase "on balance." [Laughter] But let me return to the issue that Vince originally raised and that has come out from several of the participants' perspectives. I think we will soon be facing a very difficult situation. If the forecast comes in along the lines that we expect, which for us is a nice situation in which inflation comes down to 2 percent in the core and looks as though it will stay there—that it's not just a temporary one-shot deal and that it will go back up again—we're going to face a very difficult issue in terms of the statement. Unless I have a sense of the consensus on this Committee for what is our ultimate objective for inflation, I'm going to have a real problem. My view of where the number should be is that I lean toward 2 percent because I do think the transition costs are important, although I am concerned about the issue that President Lacker mentioned. We cannot be opportunistic and just change the number because, as I mentioned earlier, that creates actually a very bad expectations dynamic, which has the opposite effect of an automatic stabilizer in terms of what happens to both inflation and output. If the Committee decides that 1½ is a better number, I could definitely live with that. That would make it easier for me to deal with the statement because, if we're at 2 percent and have not built a consensus on our ultimate objective for inflation, then I'm going to be opposed to saying that inflation is elevated, and that would be an issue. If the Committee does build a consensus that we should be at a lower number than 2 percent, then I would be comfortable with it. The reason I think this is important is that we'll be forced into a discussion about this.

The problem that will then arise is that, if we have a consensus inside it will not be transparent not to reveal that to the outside. So the issue is that, whether or not we want to, we are going to be forced into a discussion about how we talk about our objectives on inflation, and we have to think very hard about it. We may not be there now, but I actually hope we are because I want inflation to come down. It's going to be on the table, and it's going to be complicated because we've had trouble building a consensus in the Committee about this issue. But we need to be aware of the difficulties we will face. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Vice Chairman.

VICE CHAIRMAN GEITHNER. I think we're in a fairly good place in terms of the policy and the signal. The language in March and in alternative B today preserves a nice balance between the need to signal concern that we may not get as much moderation in inflation as we'd like and acknowledgement of some of the dispersion of views around the Committee on what our ultimate objective should be, what our preferences are, and over what period we'd like to see inflation come down to whatever level. It also gives us more flexibility. I would not want to jeopardize that balance today. I don't see any compelling need to alter market expectations today, and as I said, I am quite comfortable with alternative B.

Just on the latter, deeper conversation about where we're going in June—things will change between now and June. June will be interesting, I suspect, even if it unfolds in the way the forecast implies. But ultimately our judgment is about whether we have an acceptable forecast for inflation. It's whether the path going forward is acceptable to us in some sense, and that's what our discussion should be about. Of course, you can't separate that from where inflation is today because that's where you're starting. But as Rick and many others have consistently reminded us, the language is about the forward-looking effects of policy today, or as

they are built into market expectations, or as we assume today for the expected path of inflation going forward. But I like B and would be averse to changing it.

CHAIRMAN BERNANKE. Thank you, and thank you for all the comments. On the action, I think we're clear that we want to stay where we are. I just want to make the observation that for almost a year now we have taken a very steady approach, not only in keeping policy at a given level but in terms of our rhetoric and in terms of our confidence in moderate growth and a slow moderation of inflation. During the period, the markets and the general view have gone up and gone down, and we have maintained a pretty even keel. That increases confidence in the institution, and unless we have a reason to change our view, we should continue to stay on a steady path.

On the statement, let me start with section 4, which I recommend we not change. The response last time was a little noisier than I expected, although I did expect some response. We tried to do a number of things at once. We wanted to retain a balance of risks that emphasized inflation risks, but we also wanted to get away from forward-directing language. We wanted to get away from what I think was an inaccurate suggestion that the next move was certainly going to be up. In some circumstances, for example, we can effectively tighten by simply staying where we are. We also wanted to convey that, given the uncertainty we were experiencing, some more flexibility was needed. So it was a very complicated change to make. I'm not sure what else we could have done. In any case, I think we have the market in sync with our views, and therefore I would be very reluctant to go through that again to change the assessment of risk. So I'm going to demonstrate a very conservative perspective today, which probably won't surprise you.

On the rationale, I think I'm okay with the second section as it stands. If you'd note the parallel to March, the first sentence essentially indicated that we recognized what was going on in the economy; nevertheless, we expected, based on longer-term considerations and on our thinking about the broad sweep of developments in the economy, moderate growth going forward. This does the same thing. We acknowledge what's going on. We saw slower growth. We see the housing sector. We're not blind to current economic developments. Nevertheless, we have good fundamental reasons to think that growth will be moderate. I wouldn't necessarily reject my own suggestion to put in something about recent indicators, but putting that in does create a transitory kind of sense that we're looking only at the last few numbers. I think it's good to project the sense that we have a long view and that we are comfortable with our long view and are staying with it.

I've been trying to decide what to do about "on balance." A couple of thoughts. My inclination after I listened to the conversation—and I would be happy to take a poll or whatever—is to strike it on the following grounds: We are moving from a statement that said "recent readings on core inflation" to one that says simply "core inflation." The implication there seems to me to be that we're not referring now to the last couple of months but really to a broader measure of core inflation. So, again, in a conservative spirit, to avoid adding more language, I have a mild preference for dropping the phrase, but I'm open to comment on that.

With respect to the ongoing discussion about the implications of our language for an inflation target, we are going to have to address that. In a moment I will ask Governor Kohn to talk a bit about communications. We will have a chance in our next meeting to talk about the statement. I hope that in talking about the statement we can address issues such as how much detail we should include, how often we should change, and how we should express the balance

of risks. Obviously, we won't be able to nail all of this down, but we will have some opportunity to try to come to a broader view about what the statement's role would be in our larger communication strategy. That's another reason to be slightly conservative at this point. But thinking ahead, President Stern's suggestion about the sentence "Inflation pressures seem likely to moderate over time, but considerable uncertainty surrounds that judgment" might be a place to go at some point. We might want to change the derivative, and instead of talking about the level, we could say that we are still expecting improvement, but that there is a lot of uncertainty about it. That sort of shifts it from level to direction. That might be a solution, if we come to a point at which we are at 2 percent or just below 2 percent. But I just raise that as a possibility.

So in summary, my recommendation is no action and alternative B as written, striking the phrase "on balance." Are there any comments in particular on the phrase "on balance"? President Lacker?

MR. LACKER. I'm against it.

MS. MINEHAN. Against eliminating it?

MR. LACKER. No. Against "on balance."

MS. MINEHAN. Well, that's your proposal, right?

CHAIRMAN BERNANKE. Yes, my proposal.

MS. MINEHAN. We are fine with your proposal.

CHAIRMAN BERNANKE. We've given up on English and have now gone to sign language. [Laughter]

MR. KROSZNER. How will that be represented in the transcript? [Laughter]

CHAIRMAN BERNANKE. Let's have a vote.

MS. DANKER. I'll be reading the directive and the risk assessment from page 23 of the Bluebook. "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5¼ percent."

The risk assessment: "In these circumstances, the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information."

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
President Hoenig	Yes
Governor Kohn	Yes
Governor Kroszner	Yes
President Minehan	Yes
Governor Mishkin	Yes
President Moskow	Yes
President Poole	Yes
Governor Warsh	Yes

CHAIRMAN BERNANKE. Thank you. Let's just take a moment to update the communications situation and hear, very briefly, any comments on the dry run. But let me turn it over to Governor Kohn for some comments.

MR. KOHN. Thank you, Mr. Chairman. I have just a few points, building on what you said a few minutes ago. Just to clarify on the federal funds rate path: There was a consensus on the Committee not to publish the fed funds rate path, so we are collecting that just to understand what people's policy assumptions are and how they fit into the forecast. There was a question of whether we should assume appropriate policy or, as the Chairman had suggested, whether we should assume what you think the Committee would do rather than what it should do. I think we

just need to think about what happened. We'll have another dry run in June. I think I would collect those assumptions again in June. But when we go live, once we decide how to focus this policy, we might or might not collect the fed funds rate assumptions. The problem with going live and collecting the assumptions is that in five years they will be part of the public record. But as long as we're doing dry runs, that's not the presumption. We'll find out something about how the Committee thinks, and the Committee can discuss how it wants to characterize its assumptions.

We can discuss our experience with this dry run now. However, within the next couple of days we will ask the staff to survey the Committee about your reactions to how this went, how it could be improved, what aspects were most and least helpful, whether there are ways to use this even more than we did in our policy discussion, and if there are things—now that you've been through it once—that you'd like to see from the staff that you didn't get. What about the issue of circulating our individual submissions? Should the staff extract key issues from those submissions and circulate a list of key issues ahead of time? There are lots of things on which we need to get your views before we formulate the June dry run. So you will have an opportunity to make those comments in a formal way.

As the Chairman said, in June we will go on to some of the other communication aspects that we haven't discussed before, such as the timing of the minutes, which will interact with this minutes-like description that we're doing of the projections, and when the description needs to be published in time for the Chairman's testimony in July and February. There's a possibility of moving that up. Then how will all of this interact with the statement, with the announcement? If we go ahead with this forecast process, we'll need to make sure that the statement conforms to it. Regarding the statement, there are lots of questions, as the Chairman was saying, about the

balance of risks and how we characterize things. So I think we need to have a discussion of that in June, and it will be on the table in June.

CHAIRMAN BERNANKE. Thank you. Are there questions for Don or any comments? President Plosser.

MR. PLOSSER. I understand the concern about the fed funds rate assumption, how we interpret that, and what we ought to do. I have two suggestions. One, I still believe that it ought to be part of the practice. I've expressed that view before. Two, at least for internal purposes, for this next dry run it would be helpful to get that information on funds rate assumptions back in the write-up so that, as we think about how this works, we will have those data to look at and to discuss at least in the context of what it looks like and how it might shape what we're doing. I know that Vince gave us some indication of what people actually used when they submitted it. I'd just make a suggestion that in the next go-round the information be included for internal purposes just to see how it shapes our discussion.

MR. KOHN. Why don't we include that in the survey and see whether people want to do it or not?

MR. PLOSSER. Fine.

MR. KOHN. President Lacker.

MR. LACKER. I'd second being a little more transparent within the Committee about the fed funds rate. Compared with other elements of the sausage factory that get revealed in the transcript five years from now, I don't see why that should be so sensitive. More broadly, though, looking at these charts, I was really struck by the dispersion of inflation forecasts for 2009. I would think we would be quite uncomfortable releasing that. The natural interpretation of one's forecast for inflation at that horizon is going to be what one's objective for inflation is,

and this portrays a Committee that has not come to agreement on its objective for the central thing that it's responsible for controlling. Given that, I think that we want to come to closure on this issue before we go live. Indeed, we're doing a dry run without having gone through that. I think the dry run after we go through that is arguably going to be different, and to my mind this argues for coming to closure sooner rather than later.

CHAIRMAN BERNANKE. Governor Mishkin.

MR. MISHKIN. I just want to mention—I don't know if this is true of other people—that I had two big problems when I was doing this dry run. So though it will come out in the survey, I have a feeling that other people might have views on this. One problem was that I really had difficulty thinking about the confidence interval because I didn't feel that I had enough background from the staff about how to think about it. It's not your fault because we didn't ask you to do it. But here is my problem. I knew what the Greenbook errors were in terms of the confidence interval. I knew what the FRB/US confidence intervals were, and then there was an issue about how to think about them. I think there are things we can say about that. For example, in the context of the FRB/US, we don't assume any model uncertainty. So the issue is that you think some more uncertainty might exist for the FRB/US errors, but then, there are problems with the Greenbook forecast errors, which display greater uncertainty than the FRB/US errors. So if we had a memo to really think this through, it might provide a lot of background for us to think about how we do this. We might need to do that before we go into the next dry run, so we can have some discussion about that.

The other problem in figuring out what to write down is the issue of appropriate policy, which is central. Again, as relates to the issue that we just discussed, I use an appropriate policy of a 2 percent inflation goal because I think that's one that I'm comfortable with. It's also

consistent with what I think revealed preference has been on this Committee in terms of the policy actions we've taken. However, I would also be comfortable if the Committee built a consensus of 1½ percent. Then I would have had a different view in my projections because I would have felt that the policies in that case would be different. So there is a question mark about how to think about that in the future because it is the gray area that makes this exercise more difficult. We do need to think about it. That's what I struggled with when I sat down and asked, "How am I actually going to do this?"

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN GEITHNER. You know, we're going to have to talk through a lot of substantive issues on this. I thought, if we're going to do it, let's do it now. But you've all raised some of those questions. I'm looking at the clock. My suggestion is this. I don't know what we are planning for June—June is a two-day meeting, right?

CHAIRMAN BERNANKE. Right.

VICE CHAIRMAN GEITHNER. So I don't think we can have these conversations before the next round. Let's make sure that we give ourselves time in June and beyond so we can start to talk through this—so that those who didn't speak today about their initial reactions aren't left without the opportunity to engage in this because there's a whole range of things we could address, including the three issues raised so far.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. I take Vice Chairman Geithner's comments very seriously, but I want to raise just one thing because I would like it to get into the survey. We were offered one way of reflecting uncertainty regarding forecasts. There might be other ways—for example, alternative scenarios, qualitative discussions of risk, or that sort of thing—that seem to some of us

preferable. If you can phrase a question that would draw out of us other ways in which we might like to characterize the risks around our forecast, I think that would be helpful because I, for one, find the range of distribution of errors kind of difficult.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. Just a logistical question, Don. On the survey, I thought I heard you say that you were going to send it out in the next couple of days?

MR. KOHN. I would like to. I didn't look at Vincent when I said that. [Laughter] I mean, I think we ought to get feedback soon.

MR. MOSKOW. The only question I had is about the other iteration we're going to go through now, commenting on the staff draft over the next two weeks. I think it would be good for us to go through that experience before you send the survey out.

CHAIRMAN BERNANKE. Good point. Remind us when you can update your projections?

MR. REINHART. Through opening of business tomorrow.

CHAIRMAN BERNANKE. Fine. So you have, I guess, the rest of the day to update your projections if you like. [Laughter] Governor Kroszner.

MR. KROSZNER. I just want to underscore this point. It's not at all clear to me that providing the median of the 70 percent confidence bands is going to be useful to the markets. I think that we have to think about what will be useful to the markets. It is important to convey some sense of the uncertainty—and I very much look forward to the memo that Rick asked for. But academics never think in terms of 70 percent confidence intervals; they think about 90 or 95 percent confidence intervals. I'm not sure who besides readers of the Bluebook and the Greenbook think in 70 percent confidence intervals. So thinking about alternative ways to

convey something useful to the markets about our sense of uncertainty, without giving a false sense of precision of 3.0 in 2008 and 3.4 in 2009, may be a better and more sensible way to go. I think we look odd putting something like this out, and I'm not sure it would actually be helpful.

CHAIRMAN BERNANKE. I just want to say that this exercise is already a success in terms of the kinds of questions it's making us confront. So I appreciate that everyone is taking this very seriously. We had very good, detailed responses from everyone.

Let me just close the meeting with a few quick announcements. First, the next meeting is two days—June 27 and June 28. You will receive additional information about the nonpolicy part of the discussion. Second, as usual, on the night of June 27, we'll have a dinner at the British Embassy. A number of us have been concerned about the late night, and so I had a discussion with the ambassador, and we've agreed that there will be no program or speaker. The evening will be strictly social, and therefore maybe we'll get out a little earlier and have more time to study the Greenbook. [Laughter] Third, we circulated a set of proposed dates for next year's meetings. If you haven't responded to Vince or Debbie, please do so. There is lunch available in the Anteroom, and the meeting is adjourned. Thank you.

END OF MEETING