Meeting of the Federal Open Market Committee
June 28-29, 2006

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., starting at 2:00 p.m. on Wednesday, June 28, 2006, and continuing at 9:00 a.m. on Thursday, June 29, 2006. Those present were the following:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Ms. Bies
Mr. Guynn
Mr. Kohn
Mr. Kroszner
Mr. Lacker
Ms. Pianalto
Mr. Warsh
Ms. Yellen

Ms. Minehan, Messrs. Moskow, Poole, and Hoenig, Alternate Members of the Federal Open Market Committee

Messrs. Fisher and Stern, Presidents of the Federal Reserve Banks of Dallas and Minneapolis, respectively

Mr. Stone, First Vice President, Federal Reserve Bank of Philadelphia

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

Messrs. Connors, Eisenbeis, Judd, Kamin, Madigan, Sniderman, Struckmeyer, Tracy, Weinberg, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

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

Ms. Zickler, Deputy Associate Director, Division of Research and Statistics, Board of Governors

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

Messrs. Dale[1] and Simpson, Senior Advisers, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

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

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

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

Mr. Perli, Senior Economist, Division of Monetary Affairs, Board of Governor

Mr. Doyle and Ms. Judson, Economists, Divisions of International Finance and Monetary Affairs, respectively, Board of Governors

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

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

Mr. Moore, First Vice President, Federal Reserve Bank of Cleveland

Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively

Mr. Evans, Ms. Mester, Messrs. Rasche, Rolnick, and Sellon, Senior Vice Presidents, Federal Reserve Banks of Chicago, Philadelphia, St. Louis, Minneapolis, and Kansas City, respectively

Ms. Mucciolo, Vice President, Federal Reserve Bank of New York

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[1] Attended Thursday's session only.

Transcript of the Federal Open Market Committee Meeting on June 28-29, 2006

June 28, 2006—Afternoon Session

CHAIRMAN BERNANKE. Good afternoon, everybody. I'd like to start off by recognizing Tom Simpson. This is Tom's last FOMC meeting. After twenty years, he is retiring in August. [Applause] Thank you.

The first item on the agenda is action to approve the FOIA plan and delegation. Debbie Danker is here on this. Are there any questions on the memo that was circulated? If not, I need a motion.

SEVERAL. I move.

CHAIRMAN BERNANKE. Without objection. Thank you. The next item is foreign currency and domestic open market operations. Mr. Kos.

MR. KOS.[1] Thank you, Mr. Chairman. For the last several meetings I have begun my comments by saying that this long period of low volatility and tight spreads continued. Today I have to modify that. During this intermeeting period, some markets were very volatile. But others were either calm or characterized by moderate levels of volatility. Spreads remain tight and default rates low.

In the first exhibit, the top panel graphs the MSCI equity indexes since May 2004—just before the U.S. tightening cycle began. Equity markets in all regions appreciated sharply, with emerging markets doing best. The U.S. index (the black line at bottom) underperformed. Not surprisingly, the high beta markets that appreciated the most also fell the most. I'll have more to say about some of the specific markets later.

The middle panel graphs the realized volatility since January 1 for the United States, Europe, Japan, and emerging market sub-indexes. Volatility rose sharply, especially outside the United States right after the May FOMC meeting. The reason for the sudden shift in sentiment is not clear. Both institutional and retail investors had reportedly allocated significant funds to emerging market equities in the past six months and so may not have had much of a cushion to absorb May's losses. These investors were more likely to sell when the tide turned. Similarly, hedge funds that mark to market and that report results to investors monthly also have less capacity to sit on sinking positions. Whether leveraged or not, investors have been more worried

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

about so-called crowded trades, which is code for widespread participation in relatively illiquid markets where the exit door is pretty small. Emerging market equities and commodities were probably the best examples of this phenomenon. A variant explanation centers not so much on technical factors and positioning but rather on the lagged effect of the withdrawal of so-called excess liquidity as central banks worldwide tighten monetary policy. I'll come back to that as well.

As the top two graphs show, the U.S. equity market has been less interesting than some of its global counterparts, many of which have fallen by double digits over the past six weeks. The S&P 500 in contrast has fallen about 6 percent since May 9. The busy table at the bottom of the page lists those periods in which the S&P 500 has fallen 10 percent or more since 1942. There have been twenty-nine such periods, or roughly once every two or three years. Viewed historically, the recent price moves are not unusual.

To drill down a bit into emerging market equities, please turn to page 2. The top panel graphs the performance of equity markets in Brazil, India, Mexico, Russia, South Africa, Korea, and Turkey. The blue bars graph performance for the period from January 2, 2006, to May 10. The red bars graph performance from May 11 through yesterday. The middle panel graphs, for the same countries, performance of their currencies for the same periods. The charts seem to support this notion of strong appetite for riskier assets earlier this year and then a sudden shift to reduce positions in riskier markets. Of course, when volatility begins to rise, intermediaries such as investment banks show an increase in value at risk that they wish to reduce. The process of reducing that risk only reinforces the trend in the short run, and assets that were thought to be uncorrelated suddenly start to move in unison.

The bottom panel graphs metal prices from January. Like emerging market equities, metal prices rose on perceived strong fundamentals. The momentum players jumped on board and gave prices a boost. Prices peaked around mid-May, and as the risk-reduction phase kicked in, prices came down, though they are still up for the year. However, the risk-reduction story goes only so far. It is evident in specific and fairly narrow segments. It is not evident, or is only modestly evident, in other segments. The top right panel on page 3 graphs the MOVE index of implied volatility on Treasury yields since January 2005. Implied volatility has remained at very low levels despite the excitement elsewhere. In fact, as shown in the top left panel, although the VIX spiked to about 23 percent in mid-May, it quickly came off and is below its long-term average.

Similarly, although credit spreads are mildly wider, as shown in the bottom three panels, absolute levels remain generous and far below the levels observed last spring, when General Motors' announcement caused a sudden widening of spreads. The bullish interpretation of the recent bout of volatility is that it has been limited to narrow sets of asset classes and could be compared with last spring's events, which did not have spillover effects outside the areas of credit derivatives and convertible arbitrage. This view suggests that those assets that appreciated "too far too fast" needed to revert to some notion of fair value and that there is no reason for broader effects. The bearish case argues that too many investors have more risk on their books than they would like and will seek opportunities to sell into any rallies. According to this view, the movements in Iceland and New Zealand in March were the precursor to May's volatility in a broader set of markets, which may be a precursor to subsequent price declines in more developed markets.

The top panel of page 4 graphs the three-month deposit rates for the dollar (in red) and for the euro (in blue), along with three-, six-, and nine-month forward rates since April 1. With dollar forward rates essentially on top of each other, the markets are probing to locate the point at which the Committee will pause from the meeting-by-meeting pattern of tightening. In contrast, the ECB is viewed as having further to go, as seen by the wider spread between cash and forward rates. Indeed, in the past few days ECB officials noted that the pace of tightening could be accelerated.

The middle panel graphs the evolution of current account balances at the Bank of Japan in blue and the overnight call rate in green. CABs came down from about ¥30 trillion to the low teens over a two-month span. However, in recent weeks the call rate has had sudden spikes toward the BOJ's Lombard-style lending facility, which is set at 10 basis points. In response, the BOJ added reserves. From a low of about ¥10 trillion in early June, CABs have risen to about ¥15 trillion, compared with required reserves of about ¥5 trillion to ¥6 trillion, and yet the call rate remains stubbornly firm.

The bottom panel graphs the Japanese government bond yield curve from three months out to ten years as of yesterday and a year earlier. As shown by the green line, a year ago the money market curve was essentially at zero, and all rates out to two years were extremely low. Arguably the weight of all those reserves in the system worked to push down more of the yield curve toward zero. Now, as those reserves are being withdrawn, money market rates are no longer being held down. So while the target call rate for the BOJ remains near zero, in reality conditions have tightened up.

Outside the G3, the story is similar: Worries about inflation are leading to modest increases in rates. Among the countries whose central banks tightened policy during the intermeeting period were Canada, Switzerland, Sweden, Turkey, South Africa, Korea, Thailand, and India. Some, like Turkey, had fundamental and policy challenges they were addressing. The linkage between monetary policy and asset markets is difficult to define and measure. But those investors that take a more bearish perspective cite the tightening of policy globally and the withdrawal of liquidity as risk factors going forward.

On page 5, the top panel graphs the two- and ten-year Treasury yields along with the target fed funds rate (in green). Yields had been hovering near the current funds target but moved toward 5.25 percent as the expectation of a ¼ point move at this meeting increased.

The middle left panel graphs the ten-year breakeven inflation rate from TIPS and the five-year rate five years forward. After rising in April, the breakeven rate came off somewhat after the Chairman's comments to the International Monetary Conference and subsequent comments by Committee members. The middle right panel graphs those same two rates over a longer time frame. Despite the attention that markets have given the rise in breakevens earlier this year, broadly speaking breakevens are very close to levels observed at the beginning of the tightening cycle two years ago.

The bottom panels graph the dollar's exchange rate against the euro and yen. The dollar has appreciated against both. Although the broad fundamentals have not changed, the dollar may have benefited from safe haven effects and an unwinding of short dollar positions as hedge funds and others reduced risks in recent weeks.

Finally, I want to say a few words about our recent experiences with check float, especially given processing changes related to Check 21 (Check Clearing for the 21st Century Act). For the Desk, float tends to be a focus on Tuesdays largely because these are peak processing days. Pronounced but episodic spikes in float began to appear last October. The top panel on page 6 graphs the actual float (the gray bars) and our forecast for float (the red dot). As we have been told, the major contributing factor to these behavior changes in float is a combination of hardware and software problems that have appeared in the processing of Check 21 files. The challenge for the Desk is to forecast float and adjust reserve provisions appropriately. At times in recent months we have been surprised by high levels of float that we did not forecast. At other times we had the opposite surprise: We were told to expect float that did not materialize. For reference, the middle panel graphs the same set of months in the year-earlier period showing lower levels of float, lower volatility of float, and important for us, less variation between the forecast and the actual.

But the important question is whether we can trace float to higher levels of funds volatility given the numerous other factors that can affect the supply of reserves. The bottom panel tries to inform, if not fully answer, that question. The dots represent the difference between the forecast and the actual float levels. The y axis graphs the standard deviation of the funds rate on that date. We have arbitrarily drawn a line at 20 basis points to demarcate a high-volatility day. The blue dots represent observation in the year-earlier period. They tend to show small forecast errors, and those dates were not associated with high levels of volatility. The red dots cover the more recent period, and they show six observations with very large forecast errors, of which four were associated with high levels of fed funds volatility. Thus, one shouldn't exaggerate the effect of Check 21 on Desk operations, but at the same time the effect should not minimized either.

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

CHAIRMAN BERNANKE. Thank you. A lot of the discussion of the stock market volatility points to uncertainty about monetary policy. But the bond market suggests very little uncertainty about monetary policy. Can you talk about that paradox?

MR. KOS. Yes, I think one of the interesting points about this period is that very question. Some of the high-risk assets that had been bid up are where we have the most-pronounced price moves, and that does perhaps suggest that positioning is a bigger part of the story because bond markets were relatively tame not just in the United States but also in other, overseas bond markets. So something of a risk adjustment seems to have happened. I think the interesting question is why, but it's very, very hard to discern that. I, at least, tended to minimize the effect that uncertainty about monetary policy itself has had in causing the volatility in emerging market equities. Certainly if one takes the opposite view, then one has some explaining to do in terms of the previous couple of years when a tightening cycle was occurring. At different times there was uncertainty about the pace and extent of the tightening, and yet those markets continued to rally despite that uncertainty.

CHAIRMAN BERNANKE. As for the turn in metals, can you talk about the relative importance of risk factors, higher interest rates, and inflation expectations?

MR. KOS. It's reasonable that all of those factors would have had some influence. I suppose another factor would be the extent to which some market participants may have seen not only positioning but also future weakness from the global tightening that is occurring, especially in the industrial countries but also in China—that such tightening will at some point affect the demand for commodities and for resources. Some of those positions and adjustments may have been fundamentally based. If one had to explain the scale of the price moves, that would probably be a secondary factor.

CHAIRMAN BERNANKE. Other questions for Dino? President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. I just want to continue with the first question that you posed to Dino. What you said in your presentation, Dino, is very close to what people have been telling me about how they are seeing the market. Some people at the top of hedge funds and mutual funds have said that market participants saw signs of overreaching everywhere in the winter and early spring. Then there was a period—and perhaps your charts are pointing to early May—when a good deal of retrenchment was going on. The hedge fund and mutual fund people were not pointing to uncertainty about U.S. monetary policy so much as uncertainty about monetary policy worldwide. But the real reason was a changed appreciation of what the worldwide economy was doing, the need for tightening because of the effect of rising growth and potential inflationary effects. Some of them continue to be concerned that enough wringing-out hasn't yet happened, that more risk-taking is still out there. You were talking about the bears and the bulls, and I'm just wondering where you are. Where do you think the balance of risk is here?

MR. KOS. From a market perspective, that is the most interesting question. I recall an exchange that President Fisher and I had a couple of meetings ago, when we were talking about the zloty and the Icelandic krona and whether that was sort of a precursor, perhaps the beginning of a longer phase of a downscaling of risk. There might be something to be said for that. We were in a lengthy period when investors were reaching for yield, and I'm not sure that two months is going to cleanse the system.

MS. MINEHAN. It's impossible to see these things beforehand, but everyone is nervous about the idea of crowded trades—what havoc they could cause. Clearly, Iceland saw a bit of it.

It's probably too much to ask to gain a sense of what could possibly be a problem here, other than that we need to be conscious that problems could be out there.

MR. KOS. I don't want to speculate. I don't think my guess would be any better than anybody else's. Another view is that the markets that had been priced furthest from fair value are the ones that are adjusting, and a case can be made that, once they equilibrate, we shouldn't have spillover effects. Now it's hard to know which way the scales will tip, but good cases can be made on both sides.

CHAIRMAN BERNANKE. Any other questions for Dino? If not, we need a vote to ratify open market transactions. Motion?

VICE CHAIRMAN GEITHNER. So moved.

CHAIRMAN BERNANKE. Without objection. Thank you. We'll turn now to the economic situation.

MR. SLIFMAN.[2] Thank you, Mr. Chairman. Many of the spending indicators that we've received over the past few weeks have been coming in to the weak side of our expectations. As you can see by comparing the red and blue striped bars in the top left panel of exhibit 1, in the Greenbook we responded to the weaker numbers by revising down our projection for second-quarter growth of real GDP to a 2 percent annual rate, about 1¾ percentage points less than in the May Greenbook. We interpreted some of the unexpected softness as reflecting weaker underlying demand, and we let that part feed through beyond the current quarter as well. But as I'll discuss shortly, the softness of the spending data wasn't the only factor leading us to temper our forecast for the out quarters.

A key component of the downward revision to the current quarter has been a slower-than-anticipated pace of consumer spending—the panel to the right. Based largely on the available data for retail sales, motor vehicles, and the CPI, we estimate that real PCE in the second quarter rose at an annual rate of only 2.2 percent. The slowing reflects a step-down in purchases of light motor vehicles as well as essentially flat real outlays for goods other than motor vehicles in the first two months of the quarter.

The other big surprise in the recent data is the sharper-than-expected drop-off in housing activity, as illustrated in the middle left panel. Despite the May uptick in

[2] The materials used by Messrs. Slifman, Wilcox, and Kamin are appended to this transcript (appendix 2).

housing starts, the levels of both starts and permits are well below where we thought they would be at the time of the last Greenbook.

In contrast to the household sector, the business sector indicators generally have been favorable. For example, orders and shipments for nondefense capital goods, plotted to the right, continue to point to strengthening demand. In addition, business spending for new structures, not shown, appears to have posted another sizable gain this quarter. The scant data available for June do not suggest that the slowdown in spending earlier in the quarter has been cumulating. As shown in the bottom left, initial claims for unemployment insurance, after retracing the rise that was associated with the effects of the temporary government shutdown in Puerto Rico, have remained in a range consistent with further moderate employment increases. Meanwhile, as shown to the right, the Empire State and Philadelphia business surveys, which were less favorable in April and May, were considerably more positive this month.

Thus, while many of the indicators of activity have lately been to the downside of our expectations, the news has not been entirely negative. All told, we still see economic growth as being in a transition—to a pace somewhat below that of potential. This can be seen in exhibit 2, which presents the longer-run outlook. We now think that real GDP, as shown by the striped blue bars in the top left panel, will increase at a 2¾ percent rate in the second half of this year and through 2007.

As I mentioned earlier, several developments besides the incoming spending indicators influenced our thinking about the economic outlook. First, revised data from the BEA now put the 2005:Q4 change in wage and salary disbursements, plotted by the black line in the top right panel, considerably below the figure published at the time of the last Greenbook, the red dashed line. The reduction in labor income suggests less consumption going forward. Regarding our assumption for monetary policy, the funds rate is assumed to be increased to 5¼ percent at this meeting and to remain there through the end of 2007. As shown in the middle right panel, the Wilshire 5000 stock market index is about 7 percent below the level we had assumed in the May Greenbook. We assume that equity prices will rise at a 6½ percent annual rate going forward—a pace that roughly maintains risk-adjusted parity with the returns on Treasury securities. The latest reading on house prices from the OFHEO index, illustrated in the bottom left panel, was in line with our expectations. We continue to expect an appreciable deceleration in house prices over the projection period. Finally, after several Greenbooks in which we revised up our forecast of crude oil prices, this round we revised down our forecast. When we prepared the Greenbook, the spot price of WTI was just under $70 per barrel, about $5 less than at the time of the May Greenbook. And with futures prices also lower, we reduced the path of crude oil prices throughout the projection period.

Exhibit 3 presents some details of the outlook for business fixed investment. As illustrated in the top left panel, total real outlays for equipment and software, excluding the volatile transportation equipment component, are projected to increase

7½ percent over the four quarters of 2006 and to grow nearly as fast in 2007. You can see from the red portion that the bulk of the support comes from spending for high-tech equipment.

Much of the recent strength in the high-tech sector has reflected a spurt in capital spending for communications equipment by telecom service providers, whereas demand for servers and PCs, the top right panel, has faltered. However, our forecast calls for real outlays for computing equipment to pick up later this year and to be sustained in 2007. Industry analysts cite several upcoming technological developments that should boost demand for new servers and PCs. These are summarized in the middle left panel. With regard to servers, several manufacturers plan to offer new generations of servers this autumn that offer significantly faster computing power and, just as important, lower electricity consumption. In addition to ongoing demand for large-scale servers from financial services companies, demand for clusters of small-scale servers—so-called server farms—by Internet content providers, for example, also appears to be robust. With regard to PCs, Intel will be introducing a fundamentally new chip design in the second half of this year that reportedly will increase performance and significantly reduce power consumption. With the new generation of chips on the horizon, prices on old chips have been plummeting. We project that demand for PCs should step up later this year, spurred by the combination of the new generation of chips for high-end users and falling prices on old chips for middle- and low-end users.

The table to the right presents our forecast for real spending on nonresidential structures. As shown in line 2, outlays for drilling and mining have been growing briskly. Reflecting the sharp increases in prices of oil and natural gas over the past few years, the number of drilling rigs in operation, the bottom left panel, has been climbing steadily, with much of the increase for the natural gas component. We see the growth of activity slowing somewhat next year as the prices of natural gas and crude oil begin to flatten. Outside drilling and mining, investment in new buildings has strengthened recently, as vacancy rates (illustrated for office buildings by the black line in the bottom right panel) have been trending down and rents received by building owners (the red line) have been climbing. That said, we think the current rate of investment growth is unsustainable, given our projection of decelerating employment and business sales, and consequently the growth rate of construction spending slows in our forecast.

Turning now to the household sector, the subject of exhibit 4, we expect real PCE, the red bars in the top left panel, to increase at a rate of about 3 percent in the second half of this year and to stay close to that pace in 2007. The forecast reflects two important crosscurrents. On the one hand, real income growth, the blue bars, is projected to be robust reflecting, in part, a waning drag from higher energy prices. On the other hand, the wealth-to-income ratio, plotted by the black line in the top right panel, falls in our forecast as house prices decelerate. With slower gains in wealth and rising interest rates, we expect that spending will be restrained relative to income and, accordingly, the saving rate will rise. The remainder of the exhibit examines the housing market. Looking through the monthly volatility, you can see that sales of new homes and existing homes, the middle left panel, are well off their peaks, whereas backlogs of unsold homes, the panel to the right, have increased significantly. In putting together the forecast, we factored in the recent data on starts, sales, and inventories, which led us to mark down the profile of activity throughout the forecast period. All told, as shown in the bottom left panel, we expect that real residential investment spending will drop 5¼ percent this year and fall another 1¾ percent next year.

Widespread anecdotal reports suggest that the drop in demand is being driven partly by a withdrawal from the market by investors and purchasers of second homes. Data on mortgage originations by investors and those purchasing second homes, which begin on a monthly basis in mid-2003 and are available only through March, are plotted to the right. The first thing to note is that these groups are a relatively small part of the overall market. Moreover, although the data are quite noisy, neither group, at least through March, was leaving the housing market in droves. Nevertheless, the recent spate of reports and a jump in the rate of contract cancellations for new homes, which homebuilders attribute largely to a retreat by investors, pose a downside risk to the housing outlook.

Another risk to the forecast is the possibility of a pronounced deterioration in the financial conditions of some vulnerable households, which could cause them to retrench significantly on spending. As shown in exhibit 5 in the top left panel, the financial obligations ratio for *homeowners* has risen sharply over the past year or so. It reached a record high in the second half of last year, and we estimate that it rose further in the first quarter of this year. (As an aside, the rate for *renters* has actually been falling since mid-2001, though that could be changing.) Some analysts have expressed concern about the high level of the financial obligations ratio—especially in light of the potential for further increases in obligations related to variable-payment mortgages, which represent more than one-fifth of all outstanding first-lien mortgages. Nowadays, variable-payment mortgages typically carry a fixed interest rate for a few years before converting to floating-rate, and most aren't scheduled for a payment change for some time. The top right table presents some evidence. As you can see in the last column, the bulk of variable-rate mortgages—both ARMs and interest-only—that have yet to reprice won't begin to reprice until after 2007. Moreover, the end of the interest-only term for nearly all I-O mortgages that are awaiting the end of the I-O term is well in the future—line 3 of the table.

Given these patterns, scheduled mortgage payment changes should have only a limited effect on the aggregate mortgage burden—adding just a few tenths to the homeowners' financial obligations ratio this year and next. As a result, we have not seen—and don't expect—a broad deterioration in mortgage credit quality. For example, as shown in the middle left panel, delinquency rates for prime borrowers, who account for 85 percent of the mortgage market, have been relatively flat for some time—as illustrated by the black line.

That said, there are some indications of stress among subprime borrowers. This group presumably is at greater potential risk for financial stress generally: Note the higher levels of their delinquency rates, the red line, compared with the prime market. In particular, we are seeing a deterioration among subprime borrowers with variable-rate mortgages—the red line in the panel to the right. This type of loan is far more prevalent in the subprime market, representing about two-thirds of all subprime mortgages. The fixed-rate period for subprime variable-rate loans is considerably shorter than that for prime loans—typically one or two years versus five to seven years—so more subprime borrowers with variable-rate mortgages are likely to see their monthly payments rise over the projection period. And the increases for those subprime borrowers experiencing resets could be striking: We estimate increases of something like 25 to 30 percent of their original payment.

More generally, households that are likely to be more financially vulnerable appear to have become decidedly more pessimistic. The bottom left panel plots the Michigan consumer sentiment index stratified by income. Consumer sentiment for both upper- and lower-income groups plunged last autumn. Currently, both groups appear more concerned than they had been before mid-2005, but the lower third appears especially nervous. Our baseline projection for the household sector incorporates these developments. Nevertheless, the greater stress evident among the most financially vulnerable segment of the household sector presents a downside risk to the forecast. David will now continue our presentation.

MR. WILCOX. Exhibit 6 turns to the outlook for compensation. The first column of the top left panel shows that recent readings on the productivity and cost measure of compensation have been quite choppy. Increases in the employment cost index, shown in the right-hand column, have been smoother but have been puzzling in their own right, in that they have been running so low. The two gauges differ methodologically in many respects, some of which are itemized in the panel to the right. Despite their differences, both measures suggest that compensation pressures have remained subdued even as the labor market has tightened.

We expect that, over the projection period, resource utilization—represented in the middle left panel by the difference between the unemployment rate and our estimate of the NAIRU—will be only a small influence on compensation growth, boosting it a bit this year and restraining it slightly next year as the economy cools. A larger influence on the outlook is represented in the right-hand panel: As shown by the third pair of bars, real compensation has not kept pace with productivity during the past several years. Between now and the end of next year, as shown by the rightmost pair of bars, we expect this situation to reverse and real compensation to increase a little more rapidly than productivity, as competition for scarcer workers causes past productivity gains and higher overall price inflation to feed into compensation. As shown in the bottom left panel, the resulting increase in real compensation causes the markup of price over unit labor cost to decline slightly from its current historically high level and, as shown in the bottom right panel, causes both the ECI and compensation per hour to accelerate somewhat in nominal terms from their recent subdued rates of growth. Nonetheless, with the price markup remaining well above its historical average, we think such increases in labor costs would not prompt new upward pressure on prices.

Exhibit 7 turns to the outlook for price inflation. As shown in the middle column of the table in the top left, core PCE prices increased more quickly in March, April, and May than in the preceding two months, boosting our forecast for the increase in core prices in the second quarter as a whole to 3.1 percent at an annual rate. As shown to the right, core inflation and its market-based component have tracked each other quite closely of late on a four-quarter basis and are projected to do so over the forecast period, suggesting no unusual mischief on the part of nonmarket prices. We continue to expect core PCE inflation to ease back next year. The major reason for this moderation is shown in the middle left panel; after bulging again this quarter, energy prices are expected to be roughly flat over the remainder of the projection period. On our assumptions, which I will discuss in more detail in a few minutes, that flattening takes about ¼ percentage point off core PCE price inflation next year.

Several measures of inflation expectations are shown in the middle right panel. As you know, consumers' expectations backed off in early June, according to the University of Michigan survey, and TIPS-based inflation compensation has come down a bit as well in the past few weeks. Nonetheless, as shown in line 5 of the table at the bottom of the page, the two CPI reports we have received since the May meeting boosted our estimate of core PCE inflation over the first half of this year 0.2 percentage point. And as shown in the third and fourth columns, we have essentially carried that bad news forward despite the slightly greater amount of slack in the economy and the slightly lower profile of energy prices from here forward.

Exhibit 8 investigates whether the staff inflation models have been moving off track recently. As you know, we consult a broad range of models, but to keep the discussion manageable, I will report on just two of those specifications. As noted in the top panel, the first is a backward-looking model that uses lagged inflation to proxy for underlying or expected inflation. The second specification is a partly forward-looking model that uses a weighted average of both lagged inflation and expected inflation as measured in the Survey of Professional Forecasters. The bottom line from this exercise is that, although both models have certainly made sizable quarterly forecasting errors of late, neither has been substantially and consistently surprised by the performance of inflation over the past several years in a way that would signal an important structural shift.

The middle panels report on the performance of the backward-looking model. The left-hand panel shows model simulations jumping off from several different points in the recent past. As you can see, the simulation trajectories are at least broadly reminiscent of the actual data. Nonetheless, it is difficult to determine with the naked eye whether the model errors have been predominantly to one side or the other. As an aid in that diagnosis, the right-hand panel uses a technique known as the Kalman filter—a statistical method for allowing a parameter estimate to evolve over time in response to new information. Here, I've applied the Kalman filter to the NAIRU. Here's the guide to interpreting the right-hand panel: If this particular model agreed with the staff estimate of the NAIRU and if every other aspect of the model were correctly specified, the Kalman filter estimate would follow the same trajectory as the staff NAIRU. And, in fact, that is pretty much what you see: Like the staff estimate of the NAIRU, the Kalman-filter estimate declines noticeably from the early 1990s through the late 1990s and then flattens out. Turning up the power on the microscope, you can see that even since the late 1990s the Kalman-filter estimate has been declining ever so slightly, signifying that inflation has been running just a little lower during the last eight years or so than the model would have expected. The source of this surprise is not identified by the technique: It could, in fact, be a declining NAIRU, but it could equally well reflect a host of other subtle changes in the economic structure.

The bottom panels repeat the experiment for the partly forward-looking model. Again, as you can see on the left, the model misses many of the finer points in the actual data but seems to capture at least the general drift, with errors roughly balanced to the high side and the low side. Indeed, as shown to the right, the Kalman filter estimates in this case have moved essentially sideways since the late 1990s, indicating that the model has not been disproportionately surprised to one side or the other.

Exhibit 9 turns to the question of whether the recent increases in energy prices have been seeping into the structure of inflation more broadly and, if so, to what extent. The top panel focuses on inflation at the producer level. The panel compares the PPI for finished energy, the red line, with a staff-constructed aggregate of output price indexes for industries in which energy costs represent a relatively high share of total costs. If energy-price pass-through were going to show up anywhere, it would be here. And, as you can see, it does in fact show up. Indeed, this may be the statistical counterpart of at least some of the anecdotes that you have been hearing about energy-price increases being passed on to customers.

On the other hand, you have also heard us report that pass-through at the consumer level has become much more muted. The middle panel documents that claim. For purposes of this exercise, we estimated the models for core PCE price inflation over rolling fifteen-year sample periods and then asked the models to tell us, based on those estimates, the predicted effect of a 10 percent increase in the relative price of energy on core PCE inflation after eight quarters. As you can see, the point estimates have been lower in recent years.

The bullets in the bottom panel summarize our assessment of this evidence. Currently in the judgmental forecast we assume that a permanent 10 percent increase in the relative price of energy would boost core inflation about 0.2 percentage point after eight quarters. This assumption balances estimates derived from shorter sample periods—like the ones shown in the middle panel—against estimates derived from longer sample periods that include data from the 1970s and 1980s. Our approach is validated by the observation that models that are forced to assume *zero* energy-price pass-through have been a little surprised by how *high* inflation has been in the last few quarters. On the other hand, models that assume a larger pass-through than the one we use judgmentally, consistent with the average experience over the past four decades, have been a little surprised by how *low* inflation has been. Our judgmental assumption tucks us neatly in between.

Exhibit 10 focuses on the price of owner-occupied housing and its role in the formulation of monetary policy. As noted in the top box, two main approaches to measuring the price of owner-occupied housing services have been outlined in the economics literature. The first approach aims to measure the *user cost* of owner-occupied housing. As shown in equation 1, the user cost depends on imputed interest expense, depreciation, and the expected capital gain. For many years, this was essentially the approach that the BLS took to measuring the price of owner-occupied housing in the CPI, except that they ignored the expected capital gain component. Increasingly, however, they and others became dissatisfied with the user-cost approach, partly because it ignored the capital gains component and partly because it guaranteed that an increase in interest rates would cause an increase in measured inflation. Finally, in 1983, they shifted to the *rental-equivalence* approach which, as summarized in equation 2, aims to measure the rents that owner-occupants would charge themselves in an assumed arms-length transaction.

In a world in which all the relevant variables could be measured perfectly and house prices were always perfectly aligned with fundamentals, the two approaches would give the same answer, and equation 3 would hold. That equation shows that rents can increase even if house prices—denoted as P_t—are decreasing. Indeed, this would be *expected* to happen if interest rates—denoted as i_t—were increasing, all else being equal. In the real world, rents could also diverge from house prices if the latter were coming down after a period of overvaluation. Thus, the constellation of facts that we see today—a decelerating OFHEO price index together with an accelerating rent index in the CPI—may not be as anomalous as intuition might at first have suggested.

The last two bullets in the box address the role of housing prices in the conduct of monetary policy. First, a broad range of analysts agree that something like owners' equivalent rent (OER) is a theoretically appropriate element of a cost-of-living index. But second, and of more direct to concern to you, whether the FOMC should define its objectives relative to a cost-of-living index that includes OER depends on what costs you are seeking to minimize in your conduct of monetary policy. For example, to name just two possibilities, you may believe that the costs of deviations from price stability derive mainly from the inability of individuals to accurately take account of inflation in their long-term financial planning, in which case you might want to aim to stabilize an index of the overall cost of living, including OER. On the other hand, you may believe that the costs of deviations from price stability have more to do with the misallocation of productive resources stemming from confusions between real and nominal price changes, in which case you might want to focus on something quite different from a cost-of-living index.

The bottom two panels turn to the operational question of more-immediate consequence—namely, what we expect to happen to rents in the near term. As shown in the bottom left panel, housing affordability has deteriorated sharply during the past two years, suggesting that rents may come under considerable further upward pressure. On the other hand, the rental vacancy rate, shown as the red line, remains quite high by historical standards, suggesting that any acceleration should be of moderate proportions. On balance, as shown in the bottom right, we have carried forward some of the recent higher readings in these categories but have taken the moderate view, at least for now.

MR. KAMIN. In contrast to the mixed news on economic activity coming out of the United States and despite the international financial volatility that Dino described, readings on foreign economic activity have been generally positive. Importantly, some of the areas of the global economy that had been weak in previous years are showing signs of strength. As indicated by the blue line in the top left panel of exhibit 11, euro-area industrial production has been moving up on balance in recent months, buoyed by solid manufacturing orders. The consumer had been the laggard in the euro zone's recovery; but retail sales have edged up, and the first-quarter data on German consumption (not shown) were quite encouraging. In Japan, the middle panel, the rapid expansion that kicked in last year appears to be continuing: As in the euro area, manufacturing orders and output have been quite strong. And after generally disappointing growth for the past several years, Mexico's economy, shown on the right, has accelerated on the back of strong manufacturing production, destined in large part for the United States.

These indications support our estimate that total foreign growth (line 1 in the middle panel) registered a healthy and broad-based 3½ percent in the current quarter. To be sure, this represents a step-down from the exceptionally strong performance in the first quarter. The deceleration was mainly in emerging market economies (line 7), particularly China and Mexico. The Chinese government has taken several additional measures in recent months to slow investment, including restricting investment in certain sectors, raising down payments for real estate purchases, and tightening lending guidelines; we anticipate that these measures will finally bring overall growth down to a more sustainable pace. Mexican GDP, having surged more than 6 percent in the first quarter, likely has cooled to a still-robust 3½ percent rate in the second. Second-quarter growth in the industrial economies (line 2) is estimated to have shown a more muted decline from its first-quarter pace. Canadian growth likely slowed along with the U.S. economy, but Japanese growth is estimated to have stayed strong while activity in the euro area and the United Kingdom accelerated.

Beyond the current quarter, we see growth in the emerging market economies holding steady while that of industrial economies moderates a bit further. Lower U.S. economic growth will restrain demand. Additionally, foreign economic activity will be responding to previous and prospective increases in interest rates. As shown in the bottom left panel, which presents our projections for key foreign policy rates, although we believe the tightening cycle is winding down in Canada, it still has a way to go in the euro area, and it has yet to begin in Japan.

Finally, the recent sharp declines in global stock markets (the black and purple lines on the right) as well as the increase in emerging market credit spreads (the red line) will likely weigh on spending in both industrial and emerging market economies. Were downdrafts in international financial markets to continue and to intensify, they could lead to sharp falloffs in activity. For now, however, financial markets appear to be stabilizing with equity prices having reversed only a small part of previous steep run-ups and EMBI spreads remaining at historically low levels. A few economies—especially Turkey, South Africa, and Hungary—remain under pressure, but this likely reflects their particular vulnerabilities rather than more generalized turmoil in emerging markets. Accordingly, returning to the top line of the middle panel, total foreign growth is projected to make a smooth landing to its estimated trend rate of roughly 3¼ percent.

This "goldilocks" projection for the foreign economies hinges on our assessment that inflation will remain contained despite continued high commodity prices and diminishing slack. As shown on the top left panel of exhibit 12, average inflation in the industrial economies is projected to move up a bit further in the current quarter but to then ease as the pass-through of higher energy and other commodity prices into consumer prices is completed. In the emerging economies, government policies tend to slow the response of domestic energy prices to those set in world markets; accordingly, inflation for these economies is not projected to peak until later this year, after which it also moves down.

As shown on the right, our projection, based on quotes from futures markets, is that prices of both West Texas intermediate crude oil and non-energy commodities will flatten out but stay elevated. Oil prices have increased considerably faster than our import-weighted aggregate of non-energy commodity prices; but some non-energy prices, especially those of metals such as copper, have indeed moved up sharply over a short period of time. The quarterly data plotted in the chart obscure the fact that, most recently, prices of metals and other commodities have moved back down, in part because of the same concerns about future monetary policies and growth that have weighed on financial markets. The middle left panel shows spot prices for copper and zinc; although these have declined sharply, they remain extremely elevated.

Increases in demand have been an important driver of the overall rise in commodity prices in the past few years. Some observers have taken this rise to be a signal that the global economy is overheating. Indeed, as shown on the right, world GDP growth (the red dashed line) has been brisk in the past two years, and this growth does appear to be correlated with the rate of change of oil and other commodity prices. Yet rising commodity prices are probably not so much a symptom of generalized global overheating as a reflection of rapid industrial development in Asia, particularly China. As indicated in line 2 of the bottom left panel, China, by itself, has contributed 1½ percentage points to global economic growth in the past three years; moreover, of the total increase in world oil consumption (shown in line 3), increases in Chinese consumption (shown in line 4) accounted for more than one-quarter. China's contributions to global output growth appear to have been supported by corresponding increases in capacity. CPI inflation excluding food, the solid line in the panel on the right, has remained quite low at around 1 percent recently. Data on overall industrial capacity are not available, but we do have data for specific sectors. The red cross-hatched bars in the panel indicate Chinese steel-making capacity, and the solid bars represent actual production. China's steel production has soared to 31 percent of total global output, but by dint of extraordinary levels of investment, capacity has risen even more.

Thus, rising commodity prices likely reflect sectoral bottlenecks in the midst of rapid Asian development rather than a more-generalized global overheating. The top left panel of exhibit 13 focuses on resource utilization in the foreign industrial economies. The solid black line represents the staff estimate of the output gap—that is, the excess of actual over potential GDP; it suggests that actual output in the industrial economies is now near but not significantly above potential. The message that the industrial economies are not overheating is also supported by measures of capacity utilization rates in manufacturing, expressed as deviations from their ten-year averages; aside from Japan, capacity utilization rates in the major foreign industrial economies are close to historical levels.

It is not possible to construct reliable measures of potential output and of the output gap for the developing economies because the requisite data on stocks of labor and especially capital are not available. Moreover, as these economies are undergoing rapid structural change, conventional output gap calculations would be doubly tenuous. Measures of manufacturing capacity utilization are available for some developing economies, as shown on the right, and they point to declining levels of resource slack. Whether overall GDP in these economies has moved up beyond potential, however, is difficult to say. The middle panels present a mixed picture of recent inflation trends in three of our important trading partners. In the euro area, twelve-month headline inflation (the solid black line) has edged up in recent months; however, both core inflation (the dotted red line) and wage growth (the blue dashed line) have stayed subdued. In Canada, headline, core, and wage inflation have all been creeping up, although core inflation remains at only 2 percent. In Mexico, notwithstanding rising global energy prices and accelerating wages, both headline inflation and core inflation have been trending down. The bottom left panel shows unit labor costs. Recent cost growth has been coming down from high levels in Canada and the United Kingdom, has been reasonably contained in France, and remains negative in Germany. Finally, the right panel indicates that long-term inflation expectations in the foreign industrial economies excluding Japan—whether measured by bond market breakeven rates (the black line) or semiannual surveys (the red line) have remained around 2½ percent or below.

To sum up this lengthy discussion, although there is some risk of more-severe upward pressures on foreign inflation, the data in hand appear to support the more benign scenario we have built into our outlook. A second key risk to the outlook centers on the dollar. As indicated in the top left panel of exhibit 14, the U.S. current account deficit reached nearly 2 percent of world GDP last year, balanced primarily by surpluses in Japan, emerging Asia, and especially the oil-exporting countries. As shown on the right, the U.S. trade balance, while having recovered a bit from its plunge in the wake of Hurricane Katrina last fall, nevertheless remains on a deteriorating trend. Market focus on external imbalances likely explains much of the decline in the broad dollar (the black line in the middle left panel) in April and early May.

However, the market's attention to global external imbalances appeared to fade by mid-May, and the dollar has moved up since then. Neither the dollar's decline nor its subsequent rebound could be explained by the differential between U.S. bond yields and foreign bond yields, shown on the right, which has moved little this year. The markets also apparently took no signal from the mid-June announcement of U.S. balance-of-payments data, shown in the bottom panel. As shown in line 1, the current account deficit narrowed in the first quarter, reflecting a smaller nominal trade deficit, reduced transfers abroad, and an improved balance on investment income. As for the financing of the deficit, private foreign purchases of U.S. securities, line 4, slowed sharply in April. However, neither the good news about the deficit nor the potentially bad news about its financing had much of an effect on the dollar.

In projecting the future path of the dollar, we have wrestled with the usual tension between the need for the dollar to fall over the longer term to restore current account sustainability and the fact that in the shorter term the dollar can do pretty much whatever it wants. Accordingly, as indicated by the black line in the top left panel of exhibit 15, in our Greenbook projection the broad real dollar depreciates only about 2 percent annually. However, we are keenly aware that a refocusing of investor attention on sustainability could lead to a much steeper decline in the dollar. This exhibit compares our baseline projection of the external sector with a simulation of the staff's FRB/Global model in which the dollar declines an additional 15 percent over the next year and a half; this is the same simulation summarized in the International Developments section of the Greenbook. As shown on the right, our baseline projection is for the trade balance to continue to deteriorate for the remainder of this year but to flatten out a bit next year as oil prices top out and the slowing of U.S. growth takes effect. Because of J-curve effects, the path of the nominal trade balance is roughly similar under the alternative simulation, at least during the forecast period. However, the additional depreciation leads to declines in real imports and increases in real exports. Accordingly, as shown in the next row, the contribution of net exports to real GDP growth, which is negative for most of next year in the baseline, becomes positive under the alternative simulation.

A more-rapid depreciation of the dollar would affect prices as well as output. As shown on the right, in our baseline projection, core import price inflation—which we project will rise to 4 percent in the third quarter because of rising commodity prices—decelerates to 1 percent by the end of next year as commodity prices flatten out. The additional dollar depreciation in the alternative simulation adds 2 to 3 percentage points to core import inflation over the forecast period. As shown in the next row, core PCE inflation rises about ¼ percentage point, reflecting both the higher import prices and brisker economic activity. Accordingly, the Taylor rule in the model leads the federal funds rate to rise above 6 percent by the end of next year. This squeezes domestic consumption and investment somewhat and, as a result, real GDP growth in the alternative simulation rises a bit less than does the contribution of net exports to GDP. Notably, foreign growth declines a bit less than U.S. growth rises. In sum, we view a sharp decline in the dollar as unpredictable but entirely possible. Such an event likely would lead to more U.S. growth but also more inflation and a need for tighter monetary policy than currently incorporated into the Greenbook forecast.

MR. SLIFMAN. The final exhibit presents your forecasts for 2006 and 2007. Compared with February, you have edged down your projections for the growth of real GDP in both years and raised your forecast of core inflation. The forecast for the unemployment rate is essentially unchanged. That concludes our presentation, and we will be happy to answer any of your questions.

CHAIRMAN BERNANKE. Any questions for our colleagues? President Lacker.

MR. LACKER. I have some more questions about latent variables. During my exchange with David at the last meeting, I was asking about inflation expectations. I learned that you didn't have a single number for expected inflation but that there were multiple measures. You offered to write a number down on an envelope for me but cautioned me against placing too much reliance on it. You went on to say that there was something called "underlying inflation," and you spent a good deal of time talking about this. You even cited some numbers—said that it was maybe 1 percent or 1½ percent in '03 and that it had risen perhaps to 2 percent at the last meeting. So I went and checked my *New Palgrave: Dictionary of Economics*. I couldn't find "underlying inflation." [Laughter] I went to the BLS website and the BEA website; it wasn't there either. I asked some of my theoretical economists if they had seen any papers in the literature that have models with underlying inflation, and I couldn't find anything. So I'm wondering what it is. I'm wondering what the number is now, how it has changed since May, and whether it might be useful information for the Committee to contemplate when deliberating about inflation policy.

MR. STOCKTON. I'll jump in, given that it looks as though you're still looking at me. [Laughter] This may either dismay you or encourage you. I wasted a great deal of staff time in the past four or five weeks actually asking our folks whether or not they could create a measure that would be useful to you, verifiable, and auditable. We haven't yet concluded that the answer is "no," but the task is very complicated, in part because our forecast, to a great extent, is a pooling exercise that encompasses a large number of models.

David showed in his presentation today two of those models—one that uses just lagged price inflation and another that uses a combination of a weighted average, in some sense, of lagged price inflation and expected inflation from the Survey of Professional Forecasters. We are also looking at models that use the Michigan survey and that use TIPS spreads. The question is, Is there some sort of latent concept in there that would be useful to you? Underlying inflation is a sense of both momentum and expectations because there are costs of adjustment associated with inflation and there are forward-looking expectations. When I was talking about underlying inflation, I was talking about the convolution of both of those two concepts. The figures I cited are very rough—they are based on a sort of decomposition of how much we can explain by what's been going on with slack in resource utilization, productivity changes, energy prices, import prices, and a variety of other things.

As I said, I could certainly write those down for you. But I have come to the view that perhaps the better thing to do is to be clear about what the raw inputs are that go into the forecast. I think we could expand the material that we're presenting in the Greenbook to include such things as the lagged price component that might be in essence inflation momentum or underlying inflation. The actual variable that we use in FRB/US is a variable that in the most recent observations uses the Survey of Professional Forecasters but in history is concatenated with the Hoey survey that we had in the early 1980s and before that a time-series technique that Sharon Kozicki and Peter Tinsley developed for us to incorporate when we estimate the longer-term model.

I could picture us doing a better job of actually showing you what the pieces are that we struggle with and pool together in coming up with a forecast. To my mind, that would be more useful than giving you a number. You might look at a number and think, well, it changed two-tenths, so the staff must think this or that. In this pooling exercise, any number, given the standard errors associated with these various models, would give "underlying inflation" a level of precision and importance in your thinking that it shouldn't have. I'd rather provide you with the inputs that I think will be helpful in giving a sense of what we're looking at and what's conditioning our thinking about the inflation outlook.

So, again, we are still looking at this question. With the natural rate of unemployment, for example, we can tell you what three coefficients in our estimated models go into producing the estimate there and can calculate standard errors and provide you with confidence intervals. That's a lot harder to do in this exercise with models with such diverse estimates of inflation expectations and the momentum of cost of adjustment. I think we can do a better job. I think we owe it to you to give you more than we currently are giving you. I'm still of the view, after having looked at this for another four or five weeks, that giving you a number on an envelope might be a greater disservice to the Committee than a service to the Committee. So I hope we can improve the quality of the analysis without necessarily providing you with some false level of precision or accuracy in this estimate.

MR. LACKER. Thank you very much, David. I'm glad to hear that you've devoted so much staff time to this, and I appreciate the effort. That number—expected inflation—isn't the objective. As you know, inflation dynamics are central to what we do. There is significant scientific uncertainty about how policy interacts with those dynamics—in particular at times like the past several months, when inflation expectations appeared to fluctuate substantially—and there must be some interplay between our policy choices, communications, expected inflation, and realized inflation. I was just looking for more insight into the staff's accumulated wisdom on these topics and was taking that expected inflation number as a thread to pull on to try to elicit more visibility.

MR. STOCKTON. Well, we can give you a bunch of threads, and I hope you'll be able to weave them together. [Laughter]

MR. LACKER. Thank you very much. I appreciate that. I have one separate question for David Wilcox. In exhibit 9, "Pass-Through of Energy Prices," the middle panel reports on some empirical work. When I try to find the counterpart in the model economy for the empirical exercise you do, it's hard to picture it not having embedded within it a policy reaction function. So I wonder, are you happy with our interpreting these numbers as measures of our credibility in some sense, or do you have changes relating to this consideration over time? I mean, isn't that what you're measuring here?

MR. WILCOX. You're entirely right. Both of these models are very partial equilibrium in their extent. That's especially true of the backward-looking model, which is strictly a reduced-form specification that takes no explicit account of inflation expectations. But even the partly forward-looking model doesn't have a sort of satellite equation that describes either the way expectations are formed or the conduct of monetary policy. So, yes, I'm absolutely certain that there is an important interaction in these estimated coefficients with the credibility of monetary policy, among other factors.

It's partly for that reason, as I mentioned in the text, that in our judgmental assumption we haven't taken on board these point estimates literally. Our judgmental assumption is that, with this metric, a 10 percentage point increase in the relative price of energy would boost core PCE inflation 0.2 percentage point. So, as you can see, that's just a little to the high side of the range. Now, I could produce other models at yet more expense in terms of staff time that probably would encompass even that. Certainly, the standard errors would well encompass that 0.2 of the assumption. But that's just a way of illustrating that we discounted a bit the point estimates from these models because we don't think the right message for you to take away is that, somehow, something has changed in the structure of the economy so that, in your conduct of monetary policy, you don't need to respond to changes in energy prices. Part of the reason that these numbers may be as low as they are is precisely because the Committee, over the past couple of decades, has responded forcefully to energy-price shocks and kept inflation in check.

MR. LACKER. Well, more broadly, if we're not to take these as exogenous because they reflect some public sense of our reaction function, we could strive to make them zero—that is to say, to view these kinds of coefficients as something we're going to influence over time.

MR. WILCOX. I suppose that would be a policy choice available to you. In thinking about how to do that, you'd want to think about the horizon at which you would want to do this. I sliced into probability space at a horizon of eight quarters. I have no idea whether you'd want to aim to cause these shocks to have zero effect after four quarters or sixteen quarters or when. But I haven't thought seriously about whether precisely zero is the right effect or not. The effect is a lot smaller now than it was three decades ago, and in many of these model specifications it's not statistically significantly different from zero.

CHAIRMAN BERNANKE. Is that a two-handed intervention?

MS. MINEHAN. Whatever. [Laughter] I forget the code here, but just a little intervention there? It may be that the effect of oil-price increases on inflation is lower than it was two or three decades ago. But, say, over the past two years, 2004 to 2006, given that we've had a number of oil shocks, if you want to call the oil-price increases that—I don't know if they all achieve the meaning of "shock"—would you say that one of the key reasons, if not the key reason, for the increase in core inflation over that period is energy prices? It seems to me that makes a difference because, if we think energy prices are going to subside, we can have a little more confidence about the falloff of inflation going forward. If the increase isn't mostly related to energy, then I think we can have less confidence of a falloff of inflation going forward.

MR. WILCOX. There are many ways to do this accounting. But on one accounting, the falloff that we have in core inflation in 2007 relative to 2006 is due entirely to the cessation of the indirect effect of energy prices passing through into the core. If you look at the top right panel of exhibit 7, you can see that core prices in 2003 got down to a very low rate of increase.

MS. MINEHAN. I remember that.

MR. WILCOX. A substantial part of the pickup since then by our calculation is due to the energy-price pass-through. My recollection is that it's on the order of 0.6 or 0.7 percentage point.

MS. MINEHAN. That's part of what we're thinking it was. A lot of this recent uptick in core is due pretty much to energy.

MR. WILCOX. Yes.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Mr. Chairman, I want to thank the staff for the global presentation, particularly for the beginning of this analysis on resource utilization, which as you know I find useful. It is noteworthy that we're beginning a process or, maybe, continuing a process and have not enough information yet to understand or to analyze it in terms of Chinese capacity. Your striking figure in exhibit 12 about steel production and steel capacity—China now has 31 percent of the world's capacity. I would imagine that you're going to see that in shipbuilding and several other sectors as we go through time. So I want to thank you for the analysis. Thank you, Karen, as well.

The question I have is this: If you go to exhibit 11 and look at your forecast for the second half of 2006 and for 2007 for the emerging economies, what's striking about these numbers at the bottom right-hand side of the table is that they are occurring as we forecast a slowing in the U.S. economy. I wonder if you might comment on the linkages between the two or on what other work we have to do on that front. One would think that either emerging-market GDP would slow by virtue of our slowing or that they would build up their own domestic consumption. And I'm wondering about the interrelationship we build into our models between the two. Again, thank you for the analysis.

MR. KAMIN. My pleasure. We're keenly aware of the fact that the United States economy plays a leading role in the global economy. During the last downturn, at the beginning of this decade, when the U.S. economy started to slow, our European colleagues often said, "Well, we're probably not going to experience a slowdown ourselves because our exports to the United States, as a fraction of our GDP, are relatively small." But, in the event, they did slow down because the United States economy affects the world not only through direct trade links but also through indirect trade links. Europe may not trade as much with the United States, but it certainly trades with other economies that do trade with the United States. Their economies are also affected through financial channels. Clearly, many financial markets turned down at the beginning of this decade as they are turning down now, albeit now to a lesser degree. So we're keenly aware that a slowdown in the U.S. economy would affect the world economy.

Now, we are not building in a very sharp slowdown for the world economy because we think that the conditions don't merit that at this time. In the emerging-market economies, the fundamentals are really quite strong except in certain economies that are under a lot of pressure. In the industrial economies, two of the main areas—the euro area and Japan—had been weak in the past and are strengthening now. So, as I say, we don't see a sharp slowdown as the most likely outcome, although there is a risk of that. At the same time, it's important to note that we are building in a moderate slowdown for the total world economy, from about 4 percent in the second half of 2005 and the first quarter of this year to about 3¼ percent by the end of the forecast period. It may not sound like a great deal, but when you aggregate the entire world economy, a percentage point change is more meaningful than it might be for an individual economy. So we're very aware of the linkages between the United States and the rest of the world and feel we have taken those into account.

MR. FISHER. If I could just rephrase the question—is it reasonable to assume that the emerging economies that you list would maintain these rates were we to slow down significantly?

MR. KAMIN. Do you mean would they slow down more than is embedded in our baseline forecast?

MR. FISHER. Right.

MR. KAMIN. That seems quite likely the case. If the U.S. economy were to slow to a significantly greater degree than embodied in the baseline forecast, probably many economies, particularly the Asian economies that depend on us very heavily for their export markets, would indeed slow down much more than we are anticipating at this time.

MS. JOHNSON. It's not a straightforward thing to calculate in some sense. The world does seem to have two engines instead of one. That is to say, we would argue strongly that the global experience in the late 1990s would not provide a clear, accurate benchmark for what we would think today. China, in particular, has reached a status and an independence from the United States that wasn't present in the 1990s, and to the extent that it has achieved a certain dynamic in domestic demand, in a reorientation of production in Asia that has very closely linked those economies with China, the Chinese economy has, if you will, a momentum or a dynamic to it that is not totally dependent on the United States and so could, indeed, continue to grow rapidly if the U.S. economy were to slow.

Nonetheless, forecasting what will happen is a bit more of an art than a science because to some degree, for example, investment in these economies, while it is measured as a component of domestic demand, is undertaken with an eye toward export sales. So the interactions of consumer confidence, of prospects for exports, and of relative price changes that shift the terms of trade for some of these economies all have to be factored into the projection, and I'm sure we don't get it precisely right by any means. But I would just say that, at the present time, the extent to which other sources of strength are arising in different parts of the global economy is, we think, an accurate representation, say, in comparison with ten years ago.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I have two questions. One is just a quick one on steel since President Fisher mentioned exhibit 12 and you showed this big increase in China's steel capacity in '05—much greater than the annual steel production increase—and I have heard about this a lot. But steel prices in the United States are staying surprisingly high according to industry observers, and they are expected to go higher this year. I was just wondering if you could shed some light on what's happening to the price of steel.

The other question I have is broader. It's really about the overall forecast. This is one of the largest midyear revisions to the forecast that I remember seeing since I've been here, in the GDP numbers particularly. Clearly, some of the data that have come in have been softer, but it seems to be more than just that. There seems to be a change in the tone of the Greenbook that suggests some reassessment of the underlying strength of the economy. That is the way I read it. But you know, there is some good news here, too. Productivity growth remains solid. Real interest rates are just in the middle of the neutral zone. Anecdotes I hear are really quite positive. So I felt a disconnect when I read the Greenbook, and I was just wondering if you could elaborate on this a bit to help me understand this change in tone of the Greenbook.

MR. KAMIN. I will answer the small question. Then Larry can answer the big one. [Laughter] I agree with you that there is actually a certain disjuncture, if you will, between the fact that steel prices have stayed up and the growing capacity in China. I don't have a full answer to your question, but I would offer just a couple of thoughts. The first is that, unlike a homogeneous primary commodity, steel comes in many forms, and there are different markets. So the very substantial increases in Chinese capacity in some products don't necessarily lead to price declines in other products that may be particularly important to the United States. The second point to mention, which is much more obvious, is that iron ore prices actually have gone up very significantly.

According to the data that we're looking at, basically they are 18 percent higher than they were a year earlier. What seems to be going on is some tension between increases in ore prices, on the one hand, and improvements in capacity, on the other hand, which might reduce the margin between the ore and the final steel products. Perhaps those circumstances will go some way toward explaining the anomaly.

MR. MOSKOW. Thank you.

MR. SLIFMAN. Let me start, and then Dave may want to add a few comments as well. Clearly, we did revise down the forecast. The downward revision was based in part, as I said in my briefing, not only on the incoming data but also on some of the other factors that I highlighted in exhibit 2. But I also want to emphasize that the news wasn't uniformly bad as it came in. Some good news came in as well, which I tried to point out. What we have done is to take down the rate of growth roughly ½ percentage point beginning in the third quarter and moving to the end of the projection period, in large part, I'd say, because of the disappointing developments in the housing sector but because of other things, such as weaker consumption news, as well. I would also say that we don't see this cumulating. We've weakened the forecast, but we don't see the economy falling apart. We continue to see an economy that, as I said, was in a transition to a rate of growth that will be below potential. We just marked it down further below potential than we had in the last Greenbook. But I don't think that there's a disconnect between what we've done and the news that we have received. I do not know, Dave, if you have additional comments.

MR. STOCKTON. It's a big revision, and as you can imagine, we agonized a lot about "isn't this is a big revision for just six weeks of information." The problem we confronted was that, if just the incoming data had been worse than we thought, we would not have made a revision as large as this. But in each case, the weakness in the data was being reinforced by weaker readings in the underlying fundamentals for those sectors. In consumption, for example, we have had a string of weak numbers. We lost $60 billion worth of income in downward revisions in the fourth quarter and the first quarter, and we're starting out with a much lower saving rate than we thought. The stock market when we closed the Greenbook was off 7 percent. Those were big fundamentals. And housing, for the most part, continued to come in worse than we thought: Although new home sales came in a bit above our expectations, starts were below what we had in May, and the permits were continuing to come down. Even in this forecast, we basically have housing activity not declining a whole lot further in terms of housing starts going forward from where they are today. So we could see some downside risks still to that.

If you ask where I think some of the vulnerabilities might be and how we could get to August and not be looking at a forecast as weak as this, I can imagine that by the end of the next week we could get 200,000 on payroll employment with some upward revisions. We could get a strong retail sales report for June with a little upward revision. This is all going to look a bit as though we overreacted. Things weren't so strong.

But in each case it was not as though we had actual data or fundamentals that we could hold onto to tell us not to revise as much as we did. So we thought we had things reasonably well balanced in this case. I could see more downside risks than upside risks to our housing forecast. The risks around our consumption forecast look pretty balanced to me. On the one hand, given how low the saving rate is and some recent weakening in employment growth, I could see how things could come in lower. On the other hand, it is easy to see that the consumer has been more resilient in recent years and could continue to be so. So I see the risks there as more balanced. On the business-sector side, however, I probably see a little more upside risk than downside risk to the forecast.

In the end, we felt as though we were compelled by our normal analytical apparatus to produce a forecast that was noticeably weaker than the last time, even though the revision looks big and showing a forecast that changed as much in such a short time certainly made us very nervous. So I think you are right to be a bit taken aback by how much we revised in a short period; however, I still think the forecast probably has both upside and downside risks to it.

MR. MOSKOW. It is very different from what I am hearing from people.

MR. STOCKTON. I want to reinforce a little of what Larry said. In this forecast, growth is just a bit below potential, there is a modest rise in the unemployment rate over the next six or seven quarters in the context of interest rates that have increased considerably and a fiscal policy that was swinging from considerable stimulus to some restraint. Industrial production is continuing to increase at a reasonably solid pace. So I don't view this forecast as telling a cyclical weakening story to any great extent. It's just a softening to below trend. That may still be inconsistent with the anecdotes you're hearing. Certainly in the industrial sector, in nonresidential construction, and even in business fixed investment, the anecdotes out there do sound quite positive at this point.

CHAIRMAN BERNANKE. President Yellen.

MS. YELLEN. This is a question for Steve or for Karen. In Monday's international briefing you referred, and I'll quote, to the possibility that we may be "nearing limits on global capacity" when you were discussing foreign inflation prospects. I'm really following up on President Fisher's question here. I want just to clarify what your thinking is about how global capacity figures into those foreign inflation forecasts that you make and then potentially into U.S. inflation. One model might be that inflation in each country depends mainly on the country's own domestic capacity or unemployment along with some role for import prices. If so, you might refer to global capacity as just an average of the states of foreign labor markets, possibly driven by some common external force that's driving global growth in all the countries. An alternative is that you might feel that there is some role for global capacity in the inflation process above and beyond how it may affect import prices. That's, I guess, the view that President Fisher has put forward, and it is interestingly endorsed in the BIS annual report that came out yesterday.

MS. JOHNSON. Yes, it certainly is.

MS. YELLEN. I mean, this is a large topic, but I don't mean to ask too large a question. I just want to clarify what your thinking is, especially when you use that term.

MS. JOHNSON. Why don't I give an overview? Then Steve can speak a bit about where we think we are. The topic has obviously become of great interest. It's cropping up in any number of places, including the BIS. When we think about it, the first problem we confront is that we were never able in the simpler world of ten years ago or so to get Phillips curves that were the least bit acceptable for almost any foreign industrial country you could name. There was always great tension in international meetings, in research efforts, in conversations that we would have with central bank staff in some of these countries, and so forth to reconcile the way we thought about inflation and the forces driving inflation because they didn't think in terms of slack and price pressures. If you go back far enough, obviously they had a lot of faith, somehow, in money growth or medium-term things. The OECD has tried often—indeed, people on my staff have tried often—to identify roles for gaps, in many of the European countries anyway. These things we call speed effects—which indicate that what matters is how fast you're changing (not whether you have a lot of slack in resources but how quickly are you closing that gap)—always seemed to loom large in certain countries, and effects of gaps were very hard to find. For example, the whole period of Japanese deflation defies explanation in terms of a Phillips curve that has any kind of reasonable properties, or the deflation would have gotten worse and worse and worse over a long period of time, and it did not. So you're starting from a world in which the links between capacity as we normally think about it and inflation were never strong and never commonly shared across a range of countries.

Now we add a level of complexity in that we have a more-globalized economy. We have had what amounts to a big, positive supply shock of labor, at the very least via the China-India-former Soviet Union line of reasoning, and suddenly people are now making arguments and estimating equations in which a global capacity measure is behaving better than I could ever find individual capacity measures to apply in these countries. It leaves me in a bit of a quandary.

I was in Basel over the weekend. The BIS released its annual report in time for its annual general meeting, and I was lucky enough to find myself seated at lunch next to the authors of some of the work. I said, "You know, I can't imagine a variable that really captures what I think of as the range of effects that something like China might have and China's labor force might have on the process of pricing in the global economy. You have this paper that you've written, and it's reflected in the annual report, and you have five different measures . . ." He basically replied that they haven't solved that problem and that the measures they used, in and of themselves, could readily be criticized, but they got some results. He swore to me that they had beaten on this equation with every possible negative rationale that would explain it other than being valid, and it still kept coming back at them as though something was there.

So I guess I am prepared now to look a little harder and try some of this ourselves, which we have been pretty skeptical about doing. But there's a big gap between the notion that there are 800 million Chinese who might potentially be engaged in global economic activity and the reality of what's determining prices in real time today. The fact that these people are potentially there but are nowhere to be seen other than in the rural areas of China, growing their own food, just makes it very difficult to think that one has captured something.

So I am certainly sympathetic with the notion that there are key bottlenecks—there are some features through the commodity markets or there are some other aspects within manufacturing in particular sectors where you see global capacity effects. But disentangling the relative price pieces of this story from something that might relate to the interaction of overall capacity and inflation is very, very difficult. I think we're just beginning to do that. In terms of this outlook, Steve may want to make a few comments about where we think we see global growth and how that might matter.

MR. KAMIN. Just to extend Karen's remarks a bit—as Karen suggested, we have for quite a while had a certain amount of difficulty identifying a standard Phillips curve relationship between domestic output gaps and inflation in all foreign economies. We have done research in our division over the past few years, and we actually have identified various types of relationships between gaps and inflation in many industrial economies. They tend to differ from economy to economy. In some, an output gap will matter; in others, a change in an output gap will matter. So there really isn't a one-size-fits-all approach toward predicting inflation in the foreign economies, and we don't use one. We use different approaches in different economies tailored as to what seems to work.

So based on that, in terms of asking what particular concept of capacity underlies the statements in our briefing on Monday, the answer is that it's one that does not take a stand on your particular issue. It depends on the economy. I should say we are, as Karen suggested, very aware of the work that the BIS has done, which shows extraordinarily important effects of the global output gap measure on domestic inflation rates. As Karen pointed out, that work has quite a few conceptual flaws in terms of how one really measures the output gap in economies where that concept is so ill-defined. On top of that, some very tenuous preliminary research that we've done seems to indicate that the equations themselves, depending on the time period and the definition of the left-hand-side dependent variable, are not quite as robust as their authors suggested. So we very much leave open the possibility that some measure of global capacity may, indeed, be important, but we are very far from being able to pin that effect down.

MS. YELLEN. Thank you.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Quickly, just as an extension to President Moskow's question—if you look at the economic projections, particularly for 2007, the staff's forecast is sort of low on GDP, middling to high on core PCE, but right up there over the central tendency on the unemployment rate. I think this comes under the heading of the surprise in this staff forecast versus what we've been seeing earlier this year. And I'm telling the truth here: I think our projections in Boston were closer to yours than what I see here in the central tendencies. So it's not that I'm objecting tremendously to your forecast, but one element I did find a little off-putting and I wanted to ask a question about is the relationship of how much your unemployment rate rises, going up from 4.6 to 5.2, to the path of the GDP forecast, even recognizing that it's ½ percentage point slower than an earlier forecast. That may be not your starting point. I recognize that. But it does seem like a big change even given the slower pace of GDP growth.

MR. WILCOX. We've had an error in Okun's law in the levels relationship between the output gap and the unemployment rate gap. The predominant explanation for what you're talking about is that we have the relationship between the output gap and the difference between the unemployment rate and the NAIRU coming back into normal alignment. Let me try to put that into English. At the moment we have an output gap that we think is just closed, but we have an unemployment rate that is below the NAIRU. That alignment is not normal. Even if the output gap just stayed where it is right now, we would expect the unemployment rate–NAIRU combination on average to come back into normal alignment. So we would get some lift in the unemployment rate just out of that, as that abnormal alignment works out of the system.

MS. MINEHAN. And is that what is pulling down inflation? Is that having an effect on your core PCE?

MR. WILCOX. As I mentioned earlier, the predominant thing that's causing core PCE to decelerate next year compared with this year is the flattening out of energy prices. Resource utilization is a tiny influence at this point.

MS. MINEHAN. So you're basically agnostic about the output gap—or the lack thereof—and what you see in the current unemployment rate. You don't believe it because it's out of whack with where you think it ought to be vis-à-vis the NAIRU?

MR. WILCOX. I'm not sure I'd use the word "agnostic." We think that both the output gap and the unemployment rate gap are pretty small. Given how flat the Phillips curve is, we think they're very slight influences on the performance of inflation over the remainder of this year and next, and we think other factors are going to loom larger in pushing inflation either up or down from where it is now.

MR. STOCKTON. Two other interpretations of the recent readings: One interpretation is that Okun's law is off and we'll get some increase in the unemployment rate. Another possibility is that the NAIRU is lower than we're estimating. In that case there would be no gap in the unemployment rate: 4.7 percent might equal the 4.7 on the natural rate, and the output gap would be zero. That obviously has, as we have illustrated in the Greenbook, beneficial implications for inflation going forward and probably will produce a lower inflation forecast. A second alternative is that potential GDP growth may have been slower than we thought. We got more of a decline in the unemployment rate with less GDP growth. If that were the case going forward, obviously it would imply higher future inflation. Again, within the normal errors of Okun's law—despite its name "law," it's a pretty loose empirical relationship [laughter]—we don't really see it necessarily calling into question our estimates yet. But I do think there are reasonable alternative interpretations of what's happened recently to the ones that we are providing in the Greenbook.

MS. MINEHAN. Yes. The second one would make inflation a little stickier.

MR. STOCKTON. Right.

CHAIRMAN BERNANKE. Well, if we could, I would like to start the economic go-round. If at all possible, I would like to complete that today so everyone could get a chance to speak today. Remember we have a two-handed intervention: If you'd like to make a comment or ask a question, please raise two hands. Otherwise, one hand puts you in the queue for your comment. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Economic growth in the Fifth District eased off the throttle a bit since our last meeting. Our June manufacturing survey released yesterday morning continued to show nearly flat activity. Indexes for shipments and new orders were barely positive, essentially unchanged from May, and down from strong readings for March and April. The service sector, on the other hand, continues to display solid growth, with overall services revenues right on their three-month average and retail sales rebounding after a dip in May. However, our big-ticket index, which is dominated by car sales, remained weak. Employment indexes for both services and manufacturing were positive in June, with a slight decline in the services sector but a substantial gain in manufacturing. District housing markets remained reasonably strong. Sales and construction activity have continued to slip from last year's levels in many areas, but our contacts do not seem surprised or panicked, and we continue to get reports of a pickup in commercial construction activity. Price pressures remain elevated in the Fifth District, and expectations for manufacturing price trends during the next six months remain about where they have been since last fall, roughly 3 percent for prices paid and 2 percent for prices received. In the services sector, expected price increases for the next six months exceeded 3½ percent for the second month in a row, setting a new record high for this twelve-year-old index.

Turning to the national economy, the Greenbook presents, as President Moskow noted, a distinctly different picture from six weeks ago, perhaps most notably with regard to consumer spending. Lower growth of household income since the middle of last year has led the staff to reduce its estimate of the level of real disposable income this quarter 1 percent, and they have reduced their estimate of consumption this quarter 0.4 percent. The Greenbook also marks down consumption growth ½ percent in the second half of ’06 and ¼ percent in ’07.

Now, it is certainly reasonable to expect lower current income to affect current consumption expenditures, but I am inclined to revise my outlook for consumption growth by less than the Greenbook. Growth in real disposable income is forecast to bounce back in the second half. So the first-half decline looks more like a permanent reduction in the level of income than a permanent reduction in the growth rate of income. I would have expected a corresponding effect on the path of consumption, a one-time reduction in the level, with less of a reduction in forecast growth rates. The same reasoning for me applies to the downward revision that has been made to current household wealth.

This quibble aside, the outlook for the real side of the economy is softer than at the time of our last meeting, but it still strikes me as broadly consistent with sustained growth fluctuating around a trend near 3 percent. True, housing market activity has fallen more rapidly since the last meeting than many, including the Greenbook authors, had expected, but the rate of decline has not fallen outside a range that at the beginning of the year would have seemed plausible. While the recent weaker-than-expected employment reports suggest slower job growth going forward, the Greenbook employment forecast seems reasonably well aligned with demographic and labor force participation trends. So on the whole, I would say that, despite the recent evolution of the economic outlook as implied by incoming information, the real side of the forecast does not seem out of the ordinary or terribly unsatisfactory to me.

The inflation picture, on the other hand, does stand out and demand some attention. We have just seen our worst three-month performance on the core CPI in more than eleven years, 3.8 percent, and the core PCE numbers are likely to be equally unfavorable. I agree with the Greenbook's assessment that special factors, such as owners' equivalent rent, do not excuse recent CPI behavior. Fortunately for us, inflation expectations have declined recently. The survey measures and TIPS spreads have moderated somewhat since our last meeting. Still, inflation expectations appear to be fluctuating around a level suggesting PCE inflation above 2 percent. Moreover, the Greenbook forecast now has year-over-year core PCE inflation remaining at 2.2 percent throughout the forecast period. To me this forecast is unacceptable.

To forecast a bulge to 2½ percent followed by a return to below 2 percent, as the Greenbook used to earlier this year, is one thing, but a plan for core inflation of more than 2 percent a year and a half from now is another thing entirely. Surely in an eighteen-month period we can improve that outcome, but I will leave until tomorrow a discussion of our policy options. For now I just want to note that recent events provide some striking evidence that I think is likely to have an important bearing on our strategy in the near term.

Leading up to our last meeting, there were several instances in which markets had responded to incoming news by marking up expected inflation and marking down the expected policy path, which I took as evidence of instability in market participants' views about our intentions regarding inflation. Similar instability was evident in the immediate aftermath of Hurricane Katrina as well. Since the last meeting, increases in the expected policy path have coincided with communications by the Committee via statements, minutes, speeches, and interviews. This was documented in this week's Board briefings.

The same appears to be true of reductions in expected inflation, I think. I take this recent history as evidence that expectations regarding inflation and the conduct of monetary policy are to a significant extent forward-looking and can be influenced by our communications. As I pointed out earlier this year, the extent to which expectations are viewed as forward-looking or backward-looking could well influence the desirability of various policy options, especially how ambitious one wants to be about bringing inflation back in line. I also take the recent history as suggesting the importance of clarifying the public's understanding of how we intend to conduct policy, even if we cannot provide definitive advance guidance about the numerical value of future policy rate settings. Thank you.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Since our last meeting, uncertainty about the outlook for both growth and inflation has increased. Clearly the inflation data are disappointing, but let me first focus on economic growth. Here the key question is how much of the second-quarter weakness is transitory and how much represents a more fundamental softening in activity. So with regard to the consumer, we share the Greenbook's assessment that increases in consumer expenditures will recover somewhere close to a rate of 3 percent in the second half of this year.

Qualitatively, this seems to be the assessment of our contacts as well. One, a major builder and operator of shopping malls throughout the United States, said that retailers at malls have been quite pleased with the first five months of the year. Although they are expecting slower growth in the second half, they did not think that the falloff would be very large. The automakers report that June sales are relatively soft but better than in May, and they kept their forecast for light vehicles for the year as a whole around 16.6 million or 16.7 million units, which means they expect the second half of the year to be similar to the first half. This was also the consensus of the twenty-four industry analysts at our annual Automotive Outlook Symposium that we held last month.

Looking at the fundamentals, like the Greenbook we think that growth in real income will be adequate to support the projected pace of spending. Under the baseline path for oil prices, energy prices should turn from a negative to a neutral factor for real income growth, though this is certainly an area of great uncertainty. Also, tight labor markets should eventually generate somewhat larger increases in wages, which should help offset the effects on overall income growth of somewhat slower gains in employment. Here I should note that we do not think that the recent slowdown in job growth is the start of a deterioration in the labor market. Our contact at Manpower studied this issue recently in response to skeptical Wall Street analysts who thought that the labor market was softening and that this would be reflected in a weakening temp sector. He studied forty major markets and found no signs of cutbacks in hiring plans by his customers, and his business continues to grow at a modest pace. Given our view of the trends in participation rates and other factors, we think that the 100,000 per month gains in payroll employment that we have seen over the past couple of months are consistent with an economy growing near potential, hence with little change in labor market slack.

Of course, housing markets are weakening. At the last meeting we were more pessimistic than the Greenbook. This time, with its large revision, the Greenbook is slightly more pessimistic than we are. However, the overall negative tone of the Greenbook seems a bit puzzling to me given the current conditions that we were discussing earlier. After all, mortgage rates are not that high. The rate of house-price appreciation has not come down more than we expected. Still, current conditions are softening. A contact from a major national builder, Pulte Homes, told us that their new orders had dropped sharply and that the current high level of construction is being supported by working off backlogs. Accordingly, he expected a more marked slowdown in building in 2007.

In the business sector, the reports from the manufacturers outside autos were, in general, very upbeat. Most indicated that orders and backlogs for investment goods were quite high. One of my directors, who is from a large, diversified manufacturing firm and who has always been cautious about future capital spending, said that demand for long-lead-time capital goods now is as strong as he has seen in his thirty years in business. And the pickup in nonresidential construction is partially offsetting the weaker activity on the residential side.

Finally, financial conditions continue to be favorable. Indeed, given the recent increases in inflation, real short-term interest rates are in the middle of the neutral range, as shown in the Bluebook. Long-term borrowing costs are relatively low, and we still hear that there’s a lot of liquidity flowing through the financial system. So we think the outlook for business investment looks solid and somewhat stronger over the course of ’06 than the Greenbook forecast.

To summarize our outlook for real activity, we think that the economy has somewhat stronger underlying momentum than the Greenbook does, and we are looking for growth at a pace of around 3 percent in the second half of this year.

With regard to inflationary pressures, many of our contacts expressed concerns about input costs. We heard numerous reports this round of manufacturers that were passing on material cost increases to their customers. In the Chicago Purchasing Managers Survey, which will be released this Friday, the prices-paid component shot up from 76.9 in May to 89.0 in June, and the overall index moved down from 61.5 to 56.5.

Capacity constraints also appear to be more common. For example, given industry consolidation, airline load factors are very high, and one major carrier indicated that it had been able to increase prices more than enough to cover higher fuel costs. We also received some reports that shortages of skilled labor were holding back production. Still, there were few signs of accelerating wage pressures.

Of course, the incoming data on consumer prices have been disappointing, as Jeff Lacker just said, and as a result our indicator model's forecasts of core PCE inflation in '06 were revised up about 0.3 percentage point, to between 2.4 and 2.6 percent. The higher projection is from the model estimated using data since 1967; the lower number is from the estimates using data only since 1984. We think inflation this year will come in closer to the 2.4 percent figure as some of the cost pass-through that has already boosted prices runs its course.

Looking to '07, the model's projections rose a tenth or two from the previous forecasts. The prediction using the post-1984 sample is 2.1 percent, whereas the long sample projection is 2.6 percent. So in the absence of some good news on the energy or materials costs front, I do not think that inflation will be headed into the bottom half of that range unless growth next year comes in a good deal below potential. At 3 percent, my forecast for GDP growth in '07 is a bit below potential. My forecast for PCE inflation is 2.3 percent. This outlook is conditioned on my view of appropriate policy, which is a slightly higher path for the funds rate than currently built into the

Greenbook because I feel that 2.4 percent inflation is too high, so I assumed that appropriate policy should attempt to arrest this acceleration.

CHAIRMAN BERNANKE. Any comments on GM's brutal outlook? [Laughter]

MR. MOSKOW. Well, it's brutal compared with last year at this time because they had an employee-incentive pricing program last year, which they're not going to have this year. It's an interesting situation because they say that Chrysler has announced that they're going to have some higher incentives. I spoke to the CEO of General Motors. He claims that they're trying to hold the line on these incentives and keep them below the very high level they've had these past few years; they are not going to cut prices as they have in previous years. We'll see whether they're able to do this, but that's their stated position now

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Thank you, Mr. Chairman. I continue to think the outlook for the national economy is reasonably positive. As best I can judge, housing activity is slowing largely as expected. The pace of increases of home prices is decelerating. Prices may be declining in some markets, but surely if we had put confidence intervals around our earlier forecasts of housing activity and of price behavior, what we are currently observing would have fallen within those intervals. Other components of aggregate demand look reasonably well maintained to me. In this regard, comments from our directors and from others with whom I have talked indicate that, except for the agricultural sector, persistently high energy prices are having at most a modest negative effect on business activity. Moreover, and equally important in my mind, the respective paths of productivity and of aggregate hours suggest to me that the economy should continue to expand at a respectable pace going forward. To sum up, my forecast of real activity is for slightly more growth than the Greenbook this year, and there is a wider positive divergence between my forecast and the Greenbook forecast for 2007.

In this regard, I have tended at these meetings to emphasize the underlying resilience and flexibility of the economy. I still have a lot of confidence in those characteristics, and I think they augur well for the longer-run performance of the economy. But I have been asking myself whether I am too sanguine about this. Is there more to the second-quarter slowing in growth or to persistently high energy prices or to the housing situation—is there more to be concerned about than my previous statements might suggest?

My tentative answer to that question is that I think we should not be overly concerned at the moment about the economic outlook in terms of growth for several reasons. As I already suggested, the effects of persistently high energy prices, although not trivial, do not appear to be devastating either. Furthermore, the financial system remains sound and flexible. Interest rates for the most part are still relatively favorable, and those factors should help to sustain demand both from households and from business. I think it is worth recalling that situation at this point; certainly bankers report, at least typically, fierce competition for customers in the current environment. Finally, the low levels of initial claims for unemployment insurance as well as anecdotes, from our District at least, suggest continued expansion in employment.

On the price front, however, current circumstances and the outlook do not now appear to me to be favorable. Earlier I had thought that the acceleration in core inflation that we were observing was likely to be similar to the experience in early 2004, when we had an acceleration but it was relatively quickly reversed. But a quick reversal doesn't look all that likely to me at the moment for several reasons. First of all, as people have already commented, the recent surprises have been on the upside, and in light of that, I have to conclude that there is a bit more underlying momentum to inflation than I earlier thought. I have the sense that other central banks around the world are seeing and responding to the same thing. If this assessment is correct and there is more inflationary momentum, then the bulk of the analytical work that has been done seems to suggest rather strongly that arresting that momentum or reversing it is not going to be easy in the short run.

Inflationary expectations apparently have not deteriorated recently, and here I am referring to the past couple of years, but I am not sure I would make the same statement with regard to the path of inflationary expectations relative to the earlier years of this decade. Overall, I have the impression that, on the margin, a little more inflation is both characterizing the economy and being accepted by households and by businesses.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Well, Mr. Chairman, last time I described the economy from our perspective as a BMW Z4 roadster that just couldn't keep itself from exceeding the speed limit. Based on the series of calls we made in preparation for this meeting and the Beige Book and what we are seeing in our own District, I would say that the real economy has downshifted—but as President Moskow said and as I understood President Lacker and certainly President Stern to have said—not to the degree that is projected in the Greenbook. I would also say that, just to kill the analogy, the inflation pressure gauge needle is moving upward.

I do talk to the CEOs of two of the largest homebuilding companies, and the way I would describe their perspective is that they have migrated from amnesia to déjà vu. Clearly, the kinds of numbers that you are projecting seem to be confirmed in terms of the default rates still running above 40 percent. Yet some markets within the country have great strength—Texas, the Carolinas, the Pacific Northwest—which is offsetting the weakness in the Northeast, the desert area, California, and so on.

Acknowledging that, I would like just to turn to what we are picking up from the other, nonhousing sectors. I would summarize their views by quoting the CEO of Cadbury Schweppes. He said that he has heard a great deal about stagflation: "The 'stag' is definitely not there; the 'flation' is increasing." The CEO of EDS, who has as his clients GM and Delphi, said, "You hear a lot about quarter-to-quarter slowdown. I'm not seeing it in the general economy."

My shipping contacts report that the rate for Panamax ships, which I talked about earlier because Panamax is the most liquid of the bulk carriers and perhaps the best indicator, rose from $16,500 at the last meeting to $22,000 last week. All the shippers to whom I spoke are revising upward the volume that they expect to ship as well as the revenue they expect to generate.

The rails report that they expect the rise in second-quarter GDP to be around 4 percent in terms of their activity level, up from the first quarter. One indicator is that Burlington Northern Santa Fe reports having shipped 200,000 units a week only one time in 2004, nine times in 2005, and sixteen times this year to date, with an acceleration in April, May, and June.

I think all of us saw FedEx's numbers that were reported. I spoke at length with the CFO of UPS, who reports that sales were up 6 percent in the first quarter. As of last week they are forecasting closer to 5 percent for the second quarter. The CFO said that "there is no dramatic slowdown that we can observe." The chairman of an airline that moves 80 million passengers, who last time worried aloud about a slowdown that they were seeing in California, says that in terms of realistic bookings, across the nation it is strong without exception and confirms President Moskow's point about being able to have some pricing power. Yet because of capacity constraints in the industry as a whole, this firm is still seeing strong demand and strong growth potential.

The retailers, I would say, are divided into two groups. The higher price points continue to do well. To quote the CEO of JCPenney: "What I am seeing through my business is not what I am hearing on CNBC or hearing from the Wall Street analysts." On the other hand, those at the lower price points—and I have two extremes here, 7-Eleven and Wal-Mart, in terms of their average sale and size—are clearly coming under pressure due to gasoline prices. But one thing that I heard in talking with the CEO of the world largest retailer was that "there is a lot of pricing pressure"; and for the first time I heard the following: "We have pricing power, and we are passing it through." You see this statement confirmed in terms of the anecdotal evidence we're receiving from those that supply retailers, companies like Cadbury Schweppes, Frito-Lay, and Kimberly-Clark. The CEO of Kimberly-Clark reports that, again, demand is good on the demand side, but the cost front continues to worry them. Regarding electronics, Texas Instruments is expecting a better second quarter than a first quarter. In cell phones, the most significant price increases they have been able to pass through in several years are now being put into the marketplace.

One ray of sunshine on the price front is in the health care sector. According to Hewitt's new reports—as you know, Mr. Chairman, this is the time of year in which they are negotiating the settlements for the price of health care to companies for next year—there has been a constant wrenching or ratcheting down of the increase in those prices, from 11.3 percent in '05 to 8.2 percent in '06, and they expect to go another percentage point downward this year.

In summary, we, like the previous reporters, have a little dissonance with the Greenbook in terms of growth. We don't see as sharp a correction in the second quarter and looking forward. We are, however, concerned about inflation. As you know, we look at the trimmed mean PCE deflator in Dallas—it has been running at a rate of about 2.4 percent. But no matter how you measure it, inflation is running above 2 percent. We've asked ourselves, and done some analysis, about where the inflation pressure is coming from. The fraction of prices weighted by expenditure increasing at annual rates of zero to 3 percent has been squeezed, whereas the fraction of prices increasing at annual rates above 3 percent has grown. Compared with December 2005, according to our analysis, Mr. Chairman, the fraction of price increases above 3 percent has risen from 33 percent to 57 percent. The fraction with price increases above 2 percent has risen from 47 to 68 percent, and small price increases have become the exception.

When you ask where the pressures are coming from—it's a little like Agatha Christie's *Murder on the Orient Express*. They all did it. All of these prices seem to be moving, and we do seem to be seeing, for the first time, a confirmation from our private-sector contacts that price expectations are rolling into pricing behavior.

One last comment. I spoke earlier and others have spoken about liquidity in the marketplace, and I reported about the desire of one utility to put together a $10 billion project that will entail 12 million manhours. They raised $11 billion for the project. The money is now in the bank, nonrecourse financing at 225 basis points over Libor. Also, you may have seen that Anadarko is effecting a merger or, rather, an acquisition of two separate companies. The CEO of Anadarko is on our Board. He reported that they raised $22 billion "at breathtaking speed." Indeed, in both transactions, three houses chose to do the entire transaction in-house. That is my report, Mr. Chairman.

CHAIRMAN BERNANKE. President Fisher, who were the respondents in that survey you were quoting about price changes?

MR. FISHER. For health care?

CHAIRMAN BERNANKE. No. You were talking about what share of price changes were above 3 percent.

MR. FISHER. Well, actually we have that on our website, Mr. Chairman. I'd be happy to give you the report. These are the breakdowns of all the different expenditure components within the PCE.

CHAIRMAN BERNANKE. I see.

MR. FISHER. I'd be happy to provide that analysis.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. Much like the Greenbook, the reports that I hear from my directors and business contacts are consistent with an economy that is expanding, but at a slower pace than earlier this year. Activity related to residential real estate has softened, and I continue to hear from my business contacts that they are concerned that consumer spending will retrench in response to the softer housing market and higher energy prices. But I do not get much indication that this concern is having a substantial effect on their business plans. Capital spending plans in particular seem little changed from the beginning of this year.

As for inflation, rising costs are widely reported by my business contacts, but most of these pressures are still related to energy and material prices. I continue to hear that productivity-adjusted wage pressures remain in check. Among producers of intermediate goods, the number of firms that report the ability to pass through costs seems to be increasing, but as of now, I am not hearing a lot in the way of substantial price increases at the retail level.

Despite what I am hearing from my business contacts, the data tell a different story, and they have affected my thinking since our last meeting. The core inflation numbers have been drifting up, whether calculated by excluding food and energy or by the trimmed mean and median CPI measures that we monitor in Cleveland. Since December the majority of items in the CPI weighted by their expenditure shares have risen at annual rates in excess of 3 percent. It is still possible, of course, that the pattern of these price increases that have been showing up lately is just an outsized but transitory pass-through of energy and commodity prices or the realignment of rents to the exceptional residential housing market that we have seen in the past few years. But this explanation is becoming increasingly difficult for me to defend.

At our May meeting I expressed concerns that risks were weighted against both our objectives, and the Greenbook baseline now reflects those concerns: weaker economic growth and higher inflation. At this time, I do not see any signs that the real economy is going to be weaker than projected in the Greenbook baseline, but unfortunately I do not expect an inflation outlook that is much better than the Greenbook baseline either. That is my report, Mr. Chairman. Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. My view of the outlook has not changed significantly since the last meeting. Generally speaking, I agree that, while we will have continued growth in GDP, we also will experience the beginning of a decline and below-trend growth probably through some of the remainder of this year and into 2007.

Indeed, in my view, there are increasing signs that the combination of tighter monetary policy and higher energy costs is beginning to slow the economy's momentum. There are clear signals that housing has begun to weaken. Moreover, the behavior of asset prices and risk premiums in financial markets suggests that credit costs have risen and market liquidity is at least beginning to see some pressure. Also, it is worth noting that many other central banks are moving to a more-restrictive policy stance, suggesting that slower growth is the likely outcome for other countries as well as ours over the period ahead.

As we discuss the economic outlook and monetary policy, I believe we must understand how our policy actions might affect the economy. Oftentimes we do focus on the long end of the yield curve. Certainly I do. However, I believe it is also important to focus attention on the shorter side. Longer-term rates continue to be unusually low. Short-term rates have risen in lockstep with the fed funds rate. Consequently, many consumers and many small businesses that have loans tied to prime have seen sharply higher rates over the past couple of years. In response, consumers have scaled back their use of home equity loans fairly significantly over the past few months. In addition, the repricing of low-rate adjustable loans continues to affect household discretionary spending, and it will begin to show up in pressure on small businesses.

Evidence from the Tenth District is generally consistent with the national economic trends. Through May, District business activity continued to be strong, as others have said, especially in manufacturing and in energy, of course, for us. Labor markets in much of our District remain tight. However, while businesses are experiencing strong cost pressures for materials and wages, they have, as far as we can see in some of our responses, been unable to really push higher prices as much as they would like. As a result, some profit margins are under pressure, and our most recent manufacturing survey indicates that many firms have scaled back some of their capital spending plans from earlier projections. As in the national economy, the District's housing activity has begun to slow. Housing permits have dropped sharply over the past several months, and the inventory of unsold homes has risen notably in many of the metro areas of our region.

Turning to the inflation outlook, I find the recent pickup in core measures of inflation to be troubling. However, I continue to think that much of the recent increase reflects long-past actions in monetary policy and some of the other resulting combinations of pass-through energy costs and the weaker dollar. Consequently, although we are likely to see more months of elevated inflation readings, I believe that inflation will likely decline over the forecast period, assuming that we are holding at a firm—I should say a slightly firm—monetary policy. Under these assumptions, I would expect core PCE inflation to decline from about 2.4 this year to 2.1 next year.

The topic of inflation expectations has received considerable attention, but I see little evidence that expectations have changed significantly, at least so far. Long-run survey measures of expected inflation remain anchored around 2½ percent for CPI. Moreover, although the TIPS data suggest that inflation risk premiums are somewhat higher than they were earlier this year, these premiums do remain low by historical standards. Thank you.

CHAIRMAN BERNANKE. Thank you. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. While recent data show that Sixth District economic activity was solid in the early spring, anecdotal reports for May and June point to some definite deceleration. The deceleration is particularly evident in housing, where an orderly slowing is now noted for the first time in areas outside Florida. Reports from Florida, especially from the hotter markets, of significantly weak single family and multifamily sales have also continued during the intermeeting period. It is especially noteworthy that both residential and nonresidential construction in hurricane-prone areas is now being severely affected by insurance problems. Underwriters are increasingly unwilling to write insurance, and those who will write it are asking for gigantic increases in premiums.

Housing prices are not falling quite as much as the decline in sales and the rise in unsold inventories might suggest. We are getting reports that builders are now making concessions and providing upgrades, such as marble countertops and other extras, and in one case even throwing in a free Mini Cooper to sweeten the deal [laughter] rather than reducing prices. So real house prices may be declining more than the data suggest. The insurance problems are affecting existing businesses as well. We are getting reports that premiums for wind damage coverage are more than double, and in some areas we have heard reports of increases substantially larger than that.

Some slowing is also evidenced in other areas besides housing. Consumption appears to be less strong than it was in the early spring, with most of the recent deceleration in consumer spending appearing to be focused on lower-end retailers. The most frequently heard explanation is the higher price of gasoline. Manufacturing remains mixed, and for the first time in years, some building-supply producers outside hurricane areas are expecting business to slow in coming months.

Price increases continue to be noted at the producer level, especially for construction materials, petroleum products, metals, and fuels—even with the decline in natural gas prices. Firms are raising their final prices as much as they can, given the competitive environment, and fuel surcharges remain in place; but in short, this is more of the same on the price front.

Redevelopment from last fall's major hurricanes along our Gulf Coast region and in New Orleans continues to have important consequences for our region's economy. In the Lake Charles area of Louisiana, which is the westernmost part of the state, recovery is showing the usual patterns that we've seen after other hurricanes over the years. Growth is now slightly above that of last year. Employment led by construction is up about 2 percent over levels a year ago. Parts of the Mississippi coast are on a similar track. The big shipyard in Pascagoula, Mississippi, which suffered more than $1 billion in damages, is back in production and is now employing about 12,000 people, compared with 13,000 before the storm. Other parts of the Mississippi coast are recovering more slowly because of a shortage of housing and the slowness in getting casinos back on line. Employment gains are dependent on the gaming industry, but it looks as though it will be late this year before most of the casinos will be able to reopen.

New Orleans is still lagging. The levees have been brought back to pre-Katrina status, but significant rebuilding has not yet begun, and most people who left have not yet returned. The area did add 24,000 jobs from the low point, but this number pales in comparison with the 191,000 jobs that were lost between April 2005 and April 2006. The area will continue to languish until the political and regulatory issues surrounding rebuilding are resolved and federal money begins to flow in significant amounts next year.

Finally, with respect to energy, repair to the damaged Gulf Coast region drilling platforms, pipeline, and refineries has progressed, and the shut-in rates in May are now down to 20 percent for oil and about 10 percent for natural gas. With the big Mars platform back fully on line, these shut-in figures should soon show additional improvement.

Turning to the national economy, GDP growth has clearly slowed, but it is also beginning to exhibit increased volatility from quarter to quarter that is more characteristic of what we saw in the 1990s rather than the uncharacteristically steady quarter-to-quarter pattern of the past several years. The volatility makes extracting signals about the likely growth path from recent data more difficult, as reflected in the wide error bands around the near-term growth projections provided in the Greenbook. My own forecast for growth in employment submitted for this meeting is slightly more optimistic than that in the Greenbook but is well within the forecast error bands.

Of greater concern to me, however, is the inflation outlook. Three issues related to inflation are particularly troublesome. First, core inflation has been outside the range that many of us have publicly stated we would prefer, and some of us have been expressing increased concern about the more recent data. Some of the work my staff has done in attempting to decompose signal from noise in these numbers implies that much of the recent rise in the three-month and six-month CPI that has gotten so much attention is noise. But this implication in no way blunts the fact that even the signal component of inflation has been on an upward trend for a while and that the trend shows little sign of abating.

Second, many have noted that the most recent jump in core CPI was driven by an increase in owners' equivalent rent. Again, work my staff has done decomposing the core CPI, looking back at the period of very low inflation as well as at the more recent period, clearly implies that the recent increase in owners' equivalent rent should not have been a surprise because the number is driven by the fundamentals of demand for homeownership relative to rental demand. With interest rates so low during the immediate post-recession period, we estimated that the preference shift for new homes relative to rental units accounted for almost half of the 1.6 percent decline that occurred in core CPI during the November 2001 to December 2003 period. Since then, with a rise in our policy interest rate, housing demand has slowed, and demand for rental units has increased with commensurate increases in rents. The point is that this movement in core CPI prices has a lot to do with our own policy shift. Putting the proper measurement debate aside, this raises the difficult question of under what circumstances we should respond to cyclical price movements that are themselves temporary responses to previous policy rate increases.

My third and last concern relates to our ability, or perhaps our willingness, in the near term or the medium term to engineer core inflation, however measured, down to the 1 percent to 2 percent range, and the risk that our continued adherence to that much-talked-about, very specific, and very tight objective without more explanation of how we plan to take such a range into account in our policy setting may soon paint us into a difficult policy corner. But I'll leave further thoughts on that to the policy discussion tomorrow. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. First Vice President Stone.

MR. STONE. Thank you, Mr. Chairman. Economic activity in the Third District is also moderating in the second quarter. Our pattern is similar to that of the nation, but the District had less acceleration in the first quarter and less deceleration in the second quarter.

Payroll employment growth in our three states is slowing. The unemployment rate has edged up slightly over the past several months, but the unemployment rate in most of the District's labor markets is still lower than a year ago. Our business contacts still report some difficulty in filling open positions, and a quarter of the respondents to a special question in our Business Outlook Survey of Manufacturers say that the increases in wage rates needed to attract new hires this year are higher than they were last year.

Regional manufacturing activity continues to expand at a moderate pace, but the indexes for new orders and shipments were up noticeably after a one-month slump in May. Despite this improvement, our manufacturers' expectations about future activity have deteriorated. While they still plan to add to payrolls and expand capacity over the next six months, they have moderated these plans since the beginning of the year.

At the last meeting, I reported that, in contrast to other Districts, retailers in our region did not express much concern that higher gasoline prices would eat into their sales; that view has changed. Conditions in our construction sector are similar to what I reported at our last meeting. Nonresidential construction continues to strengthen, but the acceleration doesn't appear to be as strong as elsewhere in the nation. In contrast, residential construction in our three states has been flat this year, and home sales are down. Thus far the slowing in our region looks to be an orderly process.

Unfortunately, consumer prices in the Philadelphia region appear to be increasing at a faster pace than those in the nation as a whole, primarily because of a larger increase in housing costs in the Philadelphia metropolitan area than in the nation. In addition, our manufacturers report that industrial price pressures have increased in recent months. Fortunately, we do not see a similar acceleration in labor costs, although the increases we are seeing in the Northeast are somewhat higher than in other parts in the country.

In summary, current conditions and the outlook in our region continue to be positive, but the rate of expansion is expected to be somewhat more modest than we've seen over the past year. Price pressures continue to be a concern in our region.

Turning to the national front, I would characterize the outlook in a similar way. Our growth forecast is similar to the Greenbook's for 2006. We expect a significant slowing in activity in the second quarter followed by a pickup during the second half of the year to a pace that is slightly below potential. The slowdown in housing and high gasoline prices contribute to a slowdown in consumer spending, and the lagged effects of rising short-term interest rates and higher oil prices keep real growth slightly below potential.

Our forecast for 2007 differs somewhat from the Greenbook. We see growth in 2007 slightly below that in 2006, whereas the Greenbook sees growth slowing appreciably. In our view, there has been more underlying strength in the economy. For example, we attribute more of the second-quarter slowdown to temporary factors. We are more optimistic than the Greenbook about employment growth. We see nonfarm payroll growth averaging a good deal more than the Greenbook forecast. We see unemployment rising to 5.1 percent by the fourth quarter of next year.

Our inflation outlook is less optimistic than the Greenbook's partly because we see less slowing of aggregate demand. We do not see core PCE inflation decelerating next year. We think the economy has been operating and will continue to operate slightly beyond full employment over the next several quarters and that foreign price competition will ease as the dollar depreciates. So despite our view that the indirect effects of the sharp rise in energy prices will wane in 2007, we expect core inflation not to decelerate. We do see some deceleration in 2008, but that is because we built in a slightly higher path for interest rates than that in the Greenbook forecast.

Of course, there are risks to the forecast. Most of them have been mentioned; but in our view, the risks to growth, even at our higher level of growth, are roughly balanced. In contrast, the inflation risks are slightly to the upside. As people have noted, core inflation has accelerated in recent months, and it is above the range I consider consistent with price stability. Should aggregate demand moderate less than expected, there is a risk that strong inflation pressures could emerge. At this point, I believe that longer-run inflation expectations remain anchored, and our forecast is predicated on monetary policy ensuring that the recent high inflation readings do not raise longer-term expectations.

This is likely my last meeting, but for sure I'll be watching carefully as we go forward. I have confidence that the Committee, along with the new Philadelphia president, will do a good job to make sure that inflation expectations remain anchored. I'd like to thank the Chairman, the participants, and the rest of this staff for how well you have treated me over the past three meetings. I have to remember that I made the statement in June 2000 that it would be my last meeting, so I say "in the foreseeable future" [laughter] it will be my last meeting. Thank you very much.

CHAIRMAN BERNANKE. Thank you very much. Let's go to President Yellen, and then perhaps we can take a break.

MS. YELLEN. Thank you, Mr. Chairman. The staff presentations make abundantly clear that most of the data we have received since we met in May have been disappointing in one way or another. Recent economic activity appears to have been quite a bit weaker than expected, as exemplified by the Greenbook, which shows a significant downward revision to 2 percent growth in the current quarter and a noticeable downward adjustment to 2¾ percent in the second half of this year. However, in view of the possibility that labor and product markets may have moved a bit beyond full utilization, as well as the recent high readings on core inflation, a period of growth a bit below potential could be seen as necessary to prevent a buildup of underlying inflationary pressures.

Under the assumption of one more funds rate increase at this meeting, it seems reasonable to me that growth will remain somewhat below its potential rate, that the unemployment rate will gradually trend upward to slightly above the NAIRU by the end of next year, and that core inflation will gradually move down toward my comfort zone. If things work out that way, I suppose the outcome would be nearly optimal, given that we are starting from an undesirably high inflation figure in the second quarter.

My concern is that it is very difficult at this stage to rule out a much less desirable scenario in which the lagged effects of our earlier reactions restrain activity more strongly and more persistently than we now expect. We might also see further financial disruptions as a consequence of investors' increased risk aversion, which is the bearish possibility that Dino described earlier. In other words, the question is whether the large surprise in the second quarter will be followed by a series of similar surprises later this year. I am concerned about downside risks to the real outlook, especially until we can better gauge the magnitude of the repercussions from the weakening in housing markets that now clearly is under way.

The data on core inflation in recent months present the opposite concern, having been higher than expected and pushing core inflation slightly above my comfort zone over the past year. This raises the possibility that we are making systematic errors in our understanding of the fundamental forces driving inflation. The key question is whether the necessary decline in inflation requires more action from us or whether inflation is being pushed up by temporary factors that will dissipate on their own. The Greenbook, I think quite reasonably, shows core inflation edging down over the next year and a half as the effects of several temporary factors abate. One possibility in this regard is that there has been a modest pass-through from energy-price increases to core inflation and that these effects will dissipate if energy prices stabilize at today's elevated levels. Moreover, part of the recent uptick traces to large increases in housing costs that are finally showing up in the CPI just as the housing market is slowing. As David noted in his briefing, the CPI measure of changes in housing prices for owner-occupied housing reflects movements in market rental rates rather than house prices and interest rates.

After long being stagnant or even falling, rents are finally moving up. Perhaps with higher mortgage interest rates and lower expectations of house-price appreciation, speculative properties are being dumped into the market, and families in the market for housing are now more inclined to rent rather than buy, driving rents up and housing prices down. It certainly would not be surprising to see a return to a more normal relationship between rents and house prices. Such a phenomenon, if it is now playing out, would most likely be transitory rather than permanent, although it could play out for quite some time.

Unfortunately, at this point it is difficult to tell how much of the recent rise in core inflation is temporary and how much is due to underlying inflation pressures like tight labor and product markets, which would suggest a more persistent problem for policy. I would feel more concerned were it not for the largely reassuring data on productivity, labor compensation, and profit margins. That said, the good news is all in the forecast, whereas the bad news is in the data. So I certainly can't rule out the possibility that the increase in core inflation in the second quarter is the leading edge of a developing trend.

In summary, I think the most likely scenario is a relatively benign one. However, we have had some rather large surprises in both output and inflation since we last met. It seems to me that, in the policy round coming up, the more important matters are the risks that growth could slow much more than now seems likely or that inflation could prove to be a more serious problem than I currently expect it to be or, for that matter, that both factors could come into play. It is unlikely that we will be able to sharpen our assessment of these risks very much until more time passes and more data become available.

CHAIRMAN BERNANKE. Thank you. Why don't we take a coffee break and be back at five after? Thank you very much.

[Coffee break]

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. New England's economy remains in relatively good shape, though not particularly vibrant or reflective of great strength going forward. Employment growth has been positive but slow in comparison to the nation. New England usually has a lower unemployment rate than the nation does, but for the first time in a decade or so the region's unemployment rate has converged, mostly because the national rate dropped, but the region has flattened out over the past several months.

Local measures of year-over-year inflation are about on track with the nation as well, though growth of local fuel and utility costs is considerably higher. Many business people talk about their efforts to limit their energy costs by upgrading capital equipment and facilities to be more energy efficient and by looking into alternative sources of energy. They also report mild success in passing along increased costs to consumers. Perhaps reflecting this, the rising price of gasoline, or even the consistently rainy weather over the past couple of months, consumer confidence has sagged a good deal.

But not all the news is gloomy. Business sentiment, as suggested by surveys and our meetings with our Small Business Advisory Group, remains positive overall as businesses report solid growth and positive hiring plans. Many continue to note how hard it is to find the skilled labor they need. Class A office vacancies have declined in both downtown and suburban markets, and rents are rising a bit. State tax collections, in particular sales and personal income taxes, are exceeding budgets in every state except Rhode Island, which appears to be experiencing an extended, though as yet unexplained, soft spot.

In general, I sense a good deal of optimism among my business contacts about their own firms but uncertainty as well when they look at the evolution of both the regional and the national economies. Indeed, both the coincident regional index done by the Philadelphia Fed and the leading index for Massachusetts that's done by the University of Massachusetts indicate that the regional economy is likely to grow only at a modest pace over the next year or so, buoyed by a resurgence in worldwide demand for high-tech and biotech products but weighed down by subdued consumer spending in the midst of high energy costs and declines in local housing markets.

I just want to reflect a bit on regional residential real estate markets. Here various data sources—and there are lots of them—suggest that regional markets have slowed, with sales falling in April and to a lesser degree in May, and unsold inventories continuing to rise, with the number of months' supply growing from about 8.7 in May of last year to more than 11 in May of this year. However, prices, depending on whether you look at median sales or repeat sales, either have fallen only slightly or have risen at about half the pace they had been rising. Most analysts see this as a soft landing or a period of stabilization after several years of strong price appreciation. Thus, while the local media and many pundits, national as well as local, wring their hands over the potential for major real estate problems, at least up to now the market correction in New England appears to be proceeding in a fairly benign way.

Turning to the national scene, incoming data have served to reinforce a sense of risk on both sides of the Greenbook forecast. As I noted earlier, that forecast is not markedly different from our own, so when I talk about risk it will be the risk to our own forecast as well. To some degree, both slower growth and higher inflation were expected in the forecasts that we've made over the past six months or so, but recent data may be exceeding those expectations. On the growth side, residential construction has slowed a bit more rapidly than we thought. Consumer confidence has fallen off. Weaker equity markets, higher gas prices, and somewhat lower housing prices have likely affected consumer spending, and recent data on job growth have been slower.

But there continue to be a good number of supports to growth. Household wealth remains high. Growth abroad remains solid. Financial conditions outside equity markets are accommodative. Businesses remain highly profitable and cash rich as reflected in the mini-boom in investment in nonresidential structures, and productivity growth remains strong. Indeed, if one averages Q1 and Q2 expected growth, it's a bit above our earlier forecast, though clearly one needs to be mindful of the fact that the first half started with a bang and its recent momentum has been considerably cooler.

Does this recent cooling portend a faster and steeper slowdown for the rest of '06 than reflected in the current Greenbook forecast or our own? Or could there be enough underlying strength to take us back to the growth scenario of our earlier projections? In particular, I wonder a bit about the slow rate of job growth that is embedded in the Greenbook forecast for 2007. I don't know what the possibility is of some surprise on the upside to the Greenbook's current '06 and, particularly, '07 projections, but I think there may well be some.

The incoming data have been more disquieting on the price front. I'm not a person who believes that a given level of inflation is bad in and of itself, within reason of course. I think it's important to assess the level of inflation against everything else going on in the economy. So at times a level of 2 percent and change might be fine; at other times it might bear watching. And as far as I know, it's been hard to prove that specific low levels of inflation—let's say, below 3 percent—are bad in and of themselves. But I do believe that a rapid increase or decrease in the rate of inflation growth can portend debilitating change in the economy. Such increases or decreases need to be monitored carefully and figure importantly in the policy discussion. Thus, I have viewed the six- and three-month changes in core CPI and PCE with some alarm as the rate of change has been faster than I am comfortable with and certainly faster than our forecast expected.

Looking at the first half of this year, and using the Greenbook forecast for Q2, we see that core inflation is nearly 50 basis points higher than what we, in Boston at least, had expected. Our analysis suggests that most of the reason for this surge in inflation over the past couple of years has been higher energy costs. Barring untoward geopolitical events, that should mean that inflation growth will moderate. But given the small to nonexistent output gap we see currently reflected in the low unemployment rate, there is more than a minor risk that resource pressures could begin to play a role in inflationary growth. The Greenbook forecast suggests that slower growth will provide a moderating influence on inflation. That's our best bet as well, but prudent risk management might suggest some hedging of that bet. Thank you.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. Let me outline a few comments from my business contacts first. Wal-Mart—and Richard talked about that a bit—has a substantial piece of its business, but by no means all of it, with lower-income consumers. They are coming in several hundred basis points below plan since Easter, and that's for the entire business. That's a pretty substantial hit for the world's largest retailer—of course, that's mostly U.S. business. There is a pronounced paycheck cycle. An example that my contact gave me was that right after receiving paychecks, which generally come at the end of the month and the middle of the month, consumers are buying large economy-size packages of stuff that comes that way. As they go through the month, up to the next paycheck, they are buying increasingly smaller quantities. They're just running out of liquidity until the next paycheck comes. Wal-Mart still has many applicants for every job. On average, when they are expanding, they have ten applicants for every job.

My contact at J.B. Hunt said that he had the general perception that the economy is slowing. Hunt and, I think, many other truck companies have not been expanding their fleets. In fact, Hunt has cut back its truck fleet because of the shortage of drivers. My contact said that there's a dire—that was his word—shortage of drivers; the shortage is worse than he has ever seen it. But—and I think this is interesting—Hunt is not responding with wage increases beyond the normal 3 to 4 percent a year. I talked to my contact about that, and he said they are just not ready to raise wages. What they do is to manage their business by telling people that "the truck capacity is not available; go someplace else." Some of that is trying to push customers into higher-cost deliveries at Hunt, and the customers may go that way or may just go someplace else.

The Greenbook discussed the large truck issue with the new truck engine requirements. That's going to produce a very large cycle in large trucks. I guess that the companies producing those large trucks and engines are fully occupied this year, and then there's going to be a slack period.

My FedEx contact said that he does not see weakness in any part of the business except domestic express. What's happening there is that, because of the high fuel surcharges and the improved ground service, quite a number of customers are shifting from express air, which is much more expensive, to ground. He said that they do have some pressure regarding IT and accounting professionals. Salaries in those areas are rising perhaps 15 percent above last year.

My UPS contact talked mostly about a tentative agreement with its pilots union. (This is not yet public information; I think it will be released later this week.) The characteristics of the agreement are quite interesting. I may not have all the details quite correct, but one of the things that astonished me is that the agreement, if ratified by the membership, runs to 12/31/2011—a labor contract that extends to 2011! There's an upfront 17.7 percent pay increase, but it reflects the fact that there have been no increases since the previous contact expired in 2003, so there's a makeup there. But the percentage increases thereafter to me are quite low, and it's interesting that they were able to get the pilots to sign on. After eighteen months, 3 percent, and then every twelve months thereafter, 3.25, 3.25, 3.25, 3.50—that may not all add up to 2011, but I was writing as fast as I could—but that's the general pattern, 3.25 to 3.5 percent stretched out over coming years. They bargained hard, and UPS was able to have a contract with no cost-of-living adjustment in it, which I think is significant in terms of inflation expectations. There were some other allowances having to do with work rules, some per diem allowances, pensions, and so forth. So the total costs are a bit higher than the 3.25, 3.5 percent would indicate, but that is the basic pattern. There is also a signing bonus when the contract is ratified. A captain will get $60,000 for signing on the dotted line that ratifies the contract, a first officer will get $40,000, and a second officer will get $34,000. Those bonuses, I believe, will not show up in the ECI, given the way the ECI is put together. So I think we want to keep our eyes out for wage agreements that have things in them that escape the ECI. I expect FedEx to follow pretty quickly.

Now I want to make a couple of general comments. The Greenbook certainly has a pretty strong business capital spending projection. My view is that, in recent years, companies have had rather contained or constrained capital expenditures, and firms worked hard to be disciplined in cost control to make sure they didn't expand capacity until they really needed it. Of course, corporate profits have done very well. But now many companies have very little excess capacity, and they are putting in place more capacity. My FedEx contact said that FedEx is increasing its capital expenditures this year, and 75 percent of the spending is for capacity expansion. In recent years, a much larger fraction was for productivity improvement rather than capacity expansion. So I think that this expansion of capacity reflects business optimism about the long run. Most of these plans have a very long period connected with them. Even though some of the expansion involves items, like computers, that are purchased off the shelf, these items are part of a much longer term plan. I don't think this part of the economy is vulnerable to a quick turnaround.

The slower growth in consumption likely reflects the pressures on lower-income consumers, and we have limited spending capacity, perhaps for many consumers, because the saving rate is already so low. So maybe what we're seeing is the long-awaited and long-desired shift in the composition of GDP toward more business investment and less consumption, and that change in mix would be very healthy. Yet to come would be any evidence of a change toward higher net exports, but this would be a change in composition with less consumption, less housing, and more business investment.

There's been a lot of discussion about energy pass-through. I'm going to make an assertion that's probably a little too bold, but I think it's basically correct: If energy prices stay where they are, in the long run full pass-through must occur. Companies can't absorb energy costs forever. Full pass-through must occur, and the pass-through occurs in several ways. One way, as with the UPS and FedEx surcharges, is that they just put those into the business. They just are not going to absorb those. Other types of pass-through occur through companies' substituting energy-saving technology—for example, to reduce energy intensity—but such technologies don't come free. So they're going to have to include the costs of those substitutions in what they do. Then we can have changes in the mix of goods that are produced and consumed, such as the change in the mix away from express air toward ground service. But the energy pass-through has to be complete in the long run. If we're going to avoid a long-run effect on the price level, higher energy prices must be offset by lower prices elsewhere, so that this becomes a change in relative prices without an effect on the aggregate price level. I just wanted to make that comment because it looks to me as though we're in a situation in which oil is expected to remain around $70 a barrel for an indefinite future and those adjustments are going to be taking place continuously. So we ought to work under the assumption that there's going to be complete pass-through.

CHAIRMAN BERNANKE. Thank you. Vice Chairman Geithner. Sorry, point of intervention.

MR. LACKER. Bill, this isn't the way people have been using "pass-through" around here. I've taken "pass-through" to mean an increase in the overall core rate, and I think that's the way everyone else has used it. So the scenario you describe wouldn't result in any pass-through, the way for example President Yellen used the term. Am I right?

MR. POOLE. Part of what we've been doing is looking at individual cases. Until recently, for example, the passenger airlines were unable to pass through fuel increases, whereas the UPSes and FedExes of the world were able to pass them through. But eventually, the passenger airlines have to pass through because they're unprofitable if they don't. The price increases have to pass through.

MR. LACKER. I understand that, Bill.

MR. POOLE. We've been using the term as a way of understanding some of the underlying pricing power that firms have. Firms do absorb cost increases in the short run, but they can't absorb them in the long run. So what has to happen is that the secondary effects will show up in the level of core unless we put downward pressure on the non-energy-related parts, so that this ends up being a relative price change and not a change in the aggregate price level. That's the point I'm trying to make.

CHAIRMAN BERNANKE. Vice Chair.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I guess I'd say the center of gravity of this discussion is a little stronger than the Greenbook, and I think that's pretty much where we are, too. We expect real GDP growth to follow a path pretty close to potential in the balance of '06 and in '07, and we expect core PCE inflation to moderate gradually to around 2 percent in '07. This forecast assumes a monetary policy path close to that of the Greenbook, somewhat under the market's forecast. Since May, in our view, the balance of risks has shifted a bit toward the less-favorable mix of somewhat more downside risk to real growth and somewhat more upside risk to inflation. Relative to the Greenbook, however, this implies that we have a stronger trajectory for demand growth and a slightly lower path for inflation.

On the growth side, I guess I'd say we see a pretty healthy adjustment process under way with a change in the composition of growth. We don't see the incoming data, the anecdotes, and the recent developments in financial markets as supporting the view that real growth is likely to stay significantly below potential over the full forecast period. We had already anticipated the slowdown in residential investment that has now materialized; therefore, we didn't see that as a basis for revising down our forecast. We believe the changes in household wealth in general have less effect on consumption than the Board staff believes, and as a result we expect a more modest deceleration in growth. We expect stronger employment growth, too, and we have a stronger view of the rate of growth in private investment going forward. The world economy still looks pretty robust to us. So overall, in our view, this supports a forecast for the economy to be growing at a rate a bit above 3 percent over the next year and a half.

But the risks to this forecast of growth seem a little less balanced than they did in May. We see less chance that the expansion is going to reaccelerate to a pace significantly above potential, and we see a bit more chance for a weaker outcome. The principal source of downside risk to us remains the possibility that households are going to reduce consumption growth significantly because they feel less rich, less secure, less comfortable borrowing, and less certain about the future.

On the inflation outlook, we have moved up our expected trajectory for core PCE price inflation, but we still expect this measure to moderate, as I said, to around 2 percent by the end of '07. This forecast is pretty favorable. It rests on the familiar fundamental forces of energy prices, if they follow the futures curve, becoming a source of moderation to price pressure going forward. Strong productivity growth keeps unit labor costs from accelerating sharply. Profit margins adjust to absorb any increase in unit labor costs that might come if labor's share starts to move back toward its historical average. Growth of aggregate demand moderates to potential—it probably has already moderated to potential—which attenuates the risk of further upside pressure on resource utilization going forward. Most important, long-term inflation expectations have come down a bit. They remain in the range of the past few years, and they have proven responsive to changes in policy expectations in a more reassuring way than we saw very recently.

As in May, however, we believe the risks to this forecast are still somewhat to the upside because of the following: Headline inflation and near-term inflation expectations have been running substantially above core for some time. Virtually all the ways we try to capture underlying inflation have been running above core. The recent rise in core may imply more momentum in inflation dynamics. You might say that long-term inflation expectations are a little higher than we want over time, and they may have been too responsive to changes in the incoming data. The medium-term trajectory for the dollar seems likely to be down. Profit margins, for reasons we don't fully understand, have been very high and have been rising, and maybe that tells us something about inflation psychology that we don't see in the long-term breakevens and TIPS. The long-term forecasts of inflation that the staff presentations give us show a lot of persistence of inflation. Inflation falls very, very slowly over time; and if that path is right, it could cause some further damage to inflation psychology.

If you just step back and look at how much our expectations and the markets' expectations about the terminal rate, the funds rate at which we'd stop tightening, have changed over the past two years, it's really remarkable. The expectations eighteen months ago were about 200 basis points below where we are now. That change may imply that we will learn in retrospect that we were too loose for too long, and therefore we'll have to do more than we thought to counteract that effect on inflation. That's a possibility, not a prediction.

So as I said in the beginning, in some sense the balance of risks has shifted in a way that complicates the monetary policy choice for us, and the shift leaves us with less confidence about the appropriate path for policy going forward. On balance, monetary policy appears to be getting some traction in the United States, and the expansion still looks to be in good shape. Inflation risks seem a bit tilted to the upside, and monetary policy needs to continue to be directed at ensuring significant moderation in the trajectory of inflation over the next few years. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Incoming data have tended to confirm to a degree both the downside risks to growth and the upside risks to core inflation that we've been talking about at recent meetings. Higher inflation interacting with policymaker comments on the inflation situation triggered higher expected real interest rates and more uncertainty about the longer-term future. That in turn further tightened financial conditions, leading to more markdown of growth prospects. Notably, the worry about added inflation pressures has not been confined to the United States, given strong growth abroad, high energy and commodity prices, and a sense that output is close to potential. Widespread policy tightening and greater uncertainty have led to increased caution on the part of investors and tighter global financial conditions.

The incoming data certainly have influenced my projections—I expect less growth and more inflation than I did a few months ago. I'm also even less confident, if that's possible, than I was given these surprises. The key question in my mind is whether the conditions are in place or soon will be in place—that is, after tomorrow—to keep core inflation at considerably lower levels than it has been so far this year. I think they are, and in this regard I'm a touch more optimistic than the staff. I have slightly lower inflation for 2007 with the same policy assumption.

Most important, I don't believe that the extra inflation we've had results from the economy producing beyond its long-run potential. We obviously can't be very confident about this. The decline in the unemployment rate to noticeably below 5 percent occurred only at the beginning of this year, but the behavior of compensation last year and this year suggests to me that the NAIRU is more likely to be under than to be over 5 percent. Perhaps better job-matching through Internet search, declining real minimum wages, and lingering worker insecurity, after the only-moderate increase in employment early in this expansion, have lowered the NAIRU a touch. We should expect compensation growth to pick up as in the staff forecast, but the implications of this pickup for inflation are unclear, given elevated profit margins and what is likely to be a competitive business environment.

I do think relative price adjustments are playing an important role in what we've been seeing. I suspect I have been implicitly underestimating the effect of higher energy prices on both output and inflation. Before this year, the effect of rising energy prices on inflation was offset by slack in the economy, and the effect on activity was offset by easing monetary policy that was put in place to counter that slack. With both slack and easing policy disappearing, the effects of higher energy prices are showing through in both output and inflation.

Another adverse price shock seems to be coming from the housing market, where the previous run-up in prices and the higher interest rates are weakening prospects for home price appreciation. This weakening, in turn, is both reducing activity and raising actual and imputed owners' equivalent rents. The longer-term inflation effects of both these relative price changes will depend on their persistence and their propagation into other prices.

In this regard, President Poole, I see us as perhaps accommodating the first-round effects of the increase in prices but making sure they don't propagate beyond that, rather than having a price-level target that would bring us back down to the old price level. With regard to persistence, petroleum prices have leveled out since April, and futures markets don't suggest further increases. It's difficult to get much of a fix on future rent increases, as prices and rents realign to higher interest rates and lower expected capital gains. In the past, most of that realignment has come through prices; but we don't have many observations, and the required adjustment appears much larger this time.

There are two keys to preventing the relative price changes from becoming embedded in broader and more persistent inflation: low inflation expectations and a competitive business environment. If energy prices do flatten out, headline inflation will come down, and I think that will help to contain the inflation expectations of households and businesses and bring down core inflation.

The propagation of higher rates of increase in rents, should they persist, to other prices I found much harder to analyze. After all, homeowners are, in effect, paying themselves higher imputed prices, and it's not clear that they would change their behavior in labor markets to expect higher wages as a result. Moreover, with respect to owners' equivalent rent, I think our usual financial market measures of inflation expectations may not be reliable indicators of behavioral shifts. Expected persistent increases in owners' equivalent rent will boost expected CPI showing up in TIPS spreads but not necessarily affecting other pricing decisions. A persistence of elevated rent increases will put a premium on viewing their implications for future inflation rather than on simply reacting to the incoming data.

The competitive environment will depend largely on the degree of resource utilization. In this regard, the negative effects of the oil and housing market developments on activity, along with the tightening in financial conditions, suggest that activity could well run at least a little below the rate of growth of potential for the next several quarters. That will help to limit longer-run inflation pressures. In a sense, the forces that seem to be pushing up inflation are also contributing to the conditions that should hold it in check.

In sum, recent inflation data have been an unpleasant surprise, but the source of the price increases—that is, price shocks, not overshooting—and the economic conditions coming into place should imply a softening of core inflation over the next 1½ years. This outcome is based on the assumption that the relative price increases don't become more broadly embedded in other prices and second-round effects. We'll talk tomorrow about how policy might contribute to reducing the odds of that possibility. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I continue in my concern, which I expressed at the last meeting, about the recent pickup in inflation, especially given the news that we've had since the last meeting. In the past three months, core CPI prices and core PCE prices have grown, respectively, at 3.8 percent and 3.4 percent, twice their rate of growth in the previous three months. It has been interesting to listen to and read the analyses that many folks are doing, trying to parse the reasons for the jump in the inflation rates, no matter what index people are following.

The question, as several of you have mentioned, is really whether the reason is persistent inflation or whether it's one-off kinds of changes. We've already had several thoughts about how to look at the relation of energy-price increases and their persistence to the rate of inflation. I won't add any more to what has already been said, but I thought Mr. Wilcox had a good discussion of the owners' equivalent rent problem. What are we really looking at here? Some of the possibilities I found amusing. One of them, for example, pointed out that the index used to look at the cost of bank services was up significantly because the opportunity cost on demand deposits had gone up. If that's the problem, we can cure it by just stopping the raising of rates. [Laughter] So I do think we need to really focus on where we are. Without being able to really understand the underlying framework here, I am very concerned about the trend.

When I looked at the dramatic drop in forecast growth, at first I became very pessimistic about the outlook, as several of you have also commented. But the more I looked at the numbers, the more I came to realize that the reduction is all coming from residential housing construction. Everything else is basically a push from the last forecast for this year and next year. When I look at the forecast with that perspective, I see things differently. I've been concerned about the amount of speculation in housing construction throughout the country. To the extent that what's coming out of the housing sector is this excess speculation, that's healthy both for the long-run economy and for the stability of the financial system. One of our challenges in looking at some of the recent indicators is to determine whether we will really have a soft transition to more sustainable long-term growth of new housing or whether the transition will be bumpier or perhaps more abrupt. A chart in the Greenbook that got my attention was how rapidly the cancellation of sales orders for new housing had jumped within the past five months, from its long-run trend of 22 percent since '95 to a high rate of 30 percent. Some of these sales data or permit data that we're seeing today may mean more additions to excess inventory, and so we may see more of a blip; that's something I think we need to watch. I think we can't be complacent that a nice easing into long-term sustainable growth of housing is a sure thing at this point.

At the same time, because the drop in the forecast is all housing, the question is how to look at the relative growth of the rest of the economy. Since on net it's basically moving the way it was, I said to myself that I was comfortable with that. But why am I uncomfortable going forward? I, too, hear anecdotes about companies' optimism about what they can do in terms of increasing revenues and profits.

Regarding the capacity issue, we need to realize that a lot of the resources in housing construction are not necessarily transferable to other sectors, except perhaps to commercial real estate. That sector is forecast to pick up, and so some of the growth could happen there. But the inability to transfer resources still raises issues, in terms of both fixed investments and people, and I don't believe that the apparent slowdown to below trend, since it is driven by housing construction, is really going to create much excess capacity. So that situation makes me concerned about inflation.

Finally, I'd like to talk about how housing affects liquidity and monetary policy and our accommodation. Several of you and the staff said earlier that we have seen a bit of adjustment in debt spreads since the last meeting—and volatility is up—but we all agree that spreads are still very narrow by historical standards. Focusing on the staff's forecast of the flow of funds for the next two years, I found an interesting thing if you look at what's happening when housing drops to the level forecasted in the Greenbook. Households, in borrowing for mortgages, basically have been the major user of net borrowing in the past couple of years. The forecast is for households' need for funds, the net borrowing, to drop one-third between 2005 and 2007. The amount by which net household borrowing drops is more than the borrowing by all other sectors combined last year. So part of the issue is that, because households are such a powerful engine in net borrowing, there will be plenty of funds available. Also, as to the extent that bank borrowing and funds provision are forecast to drop, the bankers I talked with said that they aren't going to let the amount of loans that they extend drop as much as I think is in that forecast. So I really believe that the drop in housing is actually on net going to make liquidity available for other sectors rather than being a drain going forward and that will also get the growth rate more positive than the current Greenbook forecasts.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. In terms of my overall comments, I consider my views really in the center of gravity, as the Vice Chairman described it, of the speakers around the table and probably, again, quite a bit more optimistic in terms of GDP growth and perhaps also more concerned about inflation risks than the Greenbook.

When I look at the strength of the fundamentals of the economy, including strong and accelerating profits, low unemployment, highly accessible capital markets, and remarkably strong balance sheets both for consumers and businesses, I find it hard to reconcile those with some of the pessimism coming not just from the Greenbook but also from some economists that the markets follow. The two trends and the two sets of data seem to be going in very different directions.

Regarding the data that have come in since our last FOMC meeting, some time has been spent here on a few of the negative surprises, so I want to highlight a few of the positive bits of news. Federal tax receipts in May were up 26 percent from May a year ago. For the past twelve months, as we've talked about before, total tax receipts into the government went up 12.9 percent. Core retail sales rose 0.4 percent in May, up about 6.9 percent year over year if we exclude some of the more volatile items. According to surveys and anecdotes, the manufacturing base continues to be remarkably robust, both in terms of growth and in terms of jobs. I'd also note that durable goods orders, though not incredibly robust over the past month, represent growth of about 10 percent over the past three months if we exclude aircraft and look only at nondefense capital goods. So all in all, I think that the data suggest a more positive trend.

What I'd like to do is spend a little time talking about how the markets have reacted to this news and build on a couple of the points that Dino made at the outset. First, a lot of pundits have described the "new volatility" in the marketplace, and I think that Dino made a very compelling case that the volatility has really not been nearly as severe as the commentators suggest. Volatility has in some ways been a euphemism for the fact that the markets have been down, and those are obviously quite different things. [Laughter]

I think another bit of conventional wisdom is influencing decisionmakers, both in Washington and in business, and it is probably important to correct. That idea is that somehow the Fed has been the cause of this market volatility. I think that is largely incorrect. When I look at what has happened, I think that the markets are focused more and more on core economic fundamentals. We have changed in the perspective of the markets, which used to think some months and quarters ago that bad news meant good news and now they think that bad news is actually bad news. The bad news previously meant that we weren't going to be moving rates higher. Again, I think the markets, not the commentators, have a better understanding that they really need to be focusing on economic fundamentals.

When I look at the economic fundamentals, one of the data points that I look to is the state of corporate profit growth at this point in the cycle. Over the past twelve months, it was 13.6 percent, and if we look at bottom-up analyst forward estimates for the S&P 500 or for the Russell, it appears that those analyst estimates are actually accelerating. As a former banker, I will admit to some bias in these numbers, but they've been tracking reasonably well. The forward estimates are that corporate profits should be up something like 16 percent. So one of the things that we can do over the next several meetings is see how actual results track against those expectations, and my bet is that there will not be as much disappointment in those numbers as the top-down macroeconomic views would suggest.

Diving down into some of the individual markets, I suggest that they're telling us different things about the state of the economy and the state of inflation prospects. First, the equity markets have been off on the order of 7 or 8 percent, and many people, myself included, would have thought that that would have significantly affected CEO confidence, that it would have changed some perspectives about where they are in the capital expenditure cycle. I think that probably has happened in the IPO market. The IPO market has gotten slower and more selective, and issues that can come to market now have been at the top end of what's in the pipeline. If we look more broadly, however, beyond what's going on in the equity markets, if we look at the cap-ex market, capital expenditures appear to be above plan generally from the discussions I've had with folks who are on boards of different companies.

One CEO called before coming out with a survey of CEO expectations for growth in capital expenditures, and he exclaimed, "What are you guys seeing that we're not?" In some way he was checking to try to understand what the reason was for concern when his company surveys continue to be quite positive. The only caution I have is that, if you look across a breadth of CEO surveys on growth, the survey numbers have, in fact, come down from, let's say, April to June. But, again, my sense of the matter is that CEOs are scratching their own heads at this very moment that we're having a discussion about the economy in transition. The messages that come from the Fed and from other policymakers over the next month, including in the Chairman's monetary policy testimony, will be very important to set the tone, because CEOs are not sure whether to continue to hit the accelerator or whether this might be a time in their own businesses for a pause in capital expenditures.

I have a few comments on a couple of other markets. Normally in a time like this, when the equity markets are off 7, 8, or 9 percent, the merger and acquisition markets, which I view as a pretty good proxy for CEO confidence, would stop. In fact, that hasn't happened: M&A pipelines are more robust than ever. The unthinkable deals are being printed and being published. Pipelines are terrifically strong, and CEOs are ready in some ways to "bet the company" on the strength of their convictions—another reason that I have confidence that business growth could well be in excess of the Greenbook estimates.

Let me make two or three other comments. First, in terms of inflation, as I look at the commodity markets and at the TIPS markets, I'm most comforted not so much by relative moves, because those TIPS markets are certainly not perfect in describing inflation expectations, but by the responsiveness of those markets to remarks that have come from folks around this table. That is, if we think about what our authority is in influencing inflation expectations, the very real-time changes in the TIPS markets give me comfort that at this point in the cycle we will be able, with proper and appropriate policies that we'll discuss tomorrow, to change those inflation expectations rather dramatically. So I think that's a reasonably comforting idea.

Finally, the fixed-income markets and high-yield markets certainly have moved higher in terms of spreads but, again, not a lot by historical perspectives. Under normal market conditions or more-pessimistic market conditions than we have now, that move, even a small relative move, would have slowed down those pipelines. Instead, liquidity is plentiful. A couple of anecdotes that we heard before describe the situation: 25 or 30 basis points in the high-yield markets are not changing activity. They're not changing the interest of investment banks and issuers in coming to market as quickly as they can. So in terms of market functioning, apart from price, those markets are working exceptionally well.

What would be a reason for pessimism, and what would be a reason to think that the volatility that has been discussed over the past several weeks might turn into real volatility? One thing that I look to with some degree of concern is the prices that are being paid and the leverage that's being put on companies that could change the liquidity in those markets very quickly. I wouldn't be surprised to find—over the forecast period for sure and maybe even over 2006—a "club" deal in which many private equity partners group together in a highly leveraged situation to buy a very large public company and take it private and, after the course of due diligence and of that acquisition, the deal closes and they find that they missed the first coupon. That is, the leverage that is being put on these companies, for all the reasons we have discussed around this table, is relatively remarkable. Those leverage ratios used to sound like purchase prices, and they're expecting meaningful cost savings that can come out of these businesses six and nine months out. I suppose I'm concerned that, as these deals come together, there might be a negative surprise that affects the company so that the first coupon would be impossible or difficult to meet. In that circumstance, all the optimism that I've described in terms of these debt markets could dissipate rather markedly. So I don't want to suggest a degree of optimism that isn't borne out by the facts. That's something we need to continue to stay attuned to. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you, Mr. Chairman. At the last meeting I believe Dave Stockton, when he was describing the outlook, said that he was a bit schizophrenic about it. Given the comments of President Moskow, it is clear that he is no longer schizophrenic but that one side has taken over—the dark side. [Laughter] That does not seem to reflect exactly where everyone is, but I think the issues that have been brought out in the Greenbook are extremely important to consider. I, too, have knocked down my growth estimates a bit, although not quite as much as the Greenbook; and I, too, as many people have said, share a concern that some of the numbers coming in on both headline and core inflation are a bit higher than I had hoped, although I think they are still not out of a manageable range.

Obviously, payroll employment growth is a bit less robust than in the previous forecast. Since that forecast, we've had a little more cooling in housing and some softening of retail demand. I take a slightly different view of the high tax receipts that have been pouring into the Treasury because they are not only corporate tax receipts but also individual tax receipts. In some sense that's putting a bit of a drag on real disposable income because people seem to be paying a little more in taxes and, at the same time, labor costs and pay have not been going up. So taxes are potentially a bit of a drag, and the Administration seems able to pursue a tighter expenditure policy this year than it has in the past, so we won't be getting as much of a boost on the fiscal side as we have had.

A number of bright spots have been mentioned here, particularly related to business fixed investment, durable goods orders, and business confidence. But what are some of the key risks that we have before us? Obviously, housing has been discussed in great detail, and so I won't go through it in more detail. I noted, as Governor Bies did, the importance of cancellations in suggesting a change in the way people are dealing with these markets. If cancellations go up significantly, then a lot more housing stock that is searching for a buyer could be left on the market. Anecdotally, I've heard the same kinds of things that President Guynn mentioned, that the equivalent of the toaster is perhaps being given out. Such incentives are not showing up in the reported housing price, but other adjustments are.

I'm not quite as optimistic about world economic growth as the forecast is. I think a lot of uncertainties exist there. We have seen and are seeing a lot of elections, particularly in emerging markets. Mexico obviously has one coming up very soon, which could have a significant effect on a very important trading partner of the United States. Also, as a number of people have mentioned, we're seeing a lot of policy tightening around the world. The obvious question is whether the central banks outside the United States are behind the curve or ahead of the curve. Well, wherever they are, they are moving along a curve, and they seem to be moving more aggressively than they have in the past. I think the tightening is going to have more of an effect than has been embedded in a number of the forecasts, not only here but also at the IMF.

Another concern that I have relates to something that President Pianalto mentioned—a disconnect between the numbers that we're seeing on consumption and business optimism about investment. My concern is about what's going to be happening to demand for their products down the line. It's certainly disconcerting to hear that one of the largest private institutions in the world—Wal-Mart—is missing its growth targets fairly significantly. They are a very important part of retail sales. One could even say that they effectively know what retail sales are before the numbers are reported because their sales are so highly correlated with overall retail sales. So my concern is that we’re having the economy do the right sort of thing by moving more toward business investment and a little away from consumption, but if we move too much away from consumption, the demand won’t be there to make the investment pay off. We saw a bit of this in the late 1990s as we moved much more in the investment direction, but the investment turned out not to have the kinds of returns that people were expecting. Now we’re in a very fortunate situation because, even if those returns decline dramatically, a lot of profitability is out there, as Governor Warsh said. So profits could drop quite significantly, but we’re not going to see a real problem in the corporate sector, as we might have in other circumstances. I don’t want to overemphasize this concern, but to me it’s a bit of a puzzle, and I see it definitely as a risk.

Turning to the inflation outlook, people have mentioned both here and publicly a cavalcade of concerns about the upticks in PCE and CPI core numbers, which have helped in turn to reduce inflation expectations. Term premiums continue to remain low, and forward rates continue to remain low. Often inflation seems to have a bit of momentum—it continues to move up or stays elevated—even as the economy begins to slow a bit. We have to be careful in deciphering what will continue to move up and what is just inflation that is lagging a bit as the economy slows. We have seen a dramatic change in commodity prices since our last meeting. Basically, within a few days of the meeting on May 10, almost all the major commodities, whether copper, gold, or whichever one you want, came to a peak. Since then, oil has come down a little, although not all that much. I think it’s heartening for the inflation outlook going forward that those elevated levels didn’t stay that elevated. Although those commodity prices are much higher in 2006 than they had been previously, oil prices have not increased that much during 2006.

So what's going to happen to core inflation going forward? I think the excellent presentation that we had, in particular the discussion of the attempts to see how well we are modeling historical inflation and inflation going forward, shows that we have a long way to go and that we don't really understand those dynamics very well. I share Governor Kohn's intuition, for the reasons that he articulated, that core inflation going forward will soften a bit more than the Greenbook projects. I'm not going to repeat those reasons; but as Governor Kohn said, there's a lot of uncertainty about them, and we don't understand all that much.

Ultimately, as a number of people have mentioned, it comes down a lot to the type of statements that we make, the credibility that we have. That's true not only here but around the world, where we are seeing inflation rates and expected inflation rates come down quite a bit. That's something that ultimately we control very directly. In today's circumstances, when inflation is not really out of control but is moving up a little, being very clear about what our concerns are can have benefits in bringing down expectations and perhaps changing the inflation dynamic. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. If I could try your patience for a few more minutes at the end of a long afternoon, I'd like to summarize what I've heard today and then just add a few comments of my own. While I'm doing that, Brian, would you distribute table 1?

Table 1 in the Bluebook shows the three alternative suggestions for the statement. Since the Bluebook, we have received some suggestions, and we've done some wordsmithing—we've actually responded to a few things we heard today. The general tone of the three statements is the same, but we wanted you to see where it was today, so that you could think about it overnight and so that it would help you for your discussion tomorrow. That's going to be coming around.

Let me just briefly summarize what I heard. Certainly, a central theme of the speakers today was the increase of uncertainty and risk in the environment. It's getting more and more difficult to forecast, and there are certainly risks both to the upside and to the downside.

The central tendencies with respect to output seem to be that output is slowing to something close to potential. Some felt growth would be stronger than the Greenbook suggested; others, like the Greenbook, thought it would be falling somewhat below potential. A few people saw downside risks from previous tightening. There was some disagreement on the extent to which financial conditions are supportive of the economy, and some disagreement on consumption, although there was a view that lower-income consumers were going to do worse than higher-income consumers. Housing is certainly slowing. Some took the view that it was slowing more or less as expected, whereas some thought the slowing was somewhat worse than expected—certainly that's a source of downside risk. The view of the labor market is that it remains reasonably healthy, that it's difficult to find skilled workers, but there are still few signs of wage pressures in the economy. The business-sector evaluations were much more upbeat, with ongoing expansion, good sentiment, and capital investment. Finally, there seems to be considerable unease about recent inflation developments. Everyone considered these recent developments to be unwelcome. Some felt that the recent increase in inflation might be temporary. Others saw it as more persistent. But there certainly was a sense that it's a risk to the economy.

Let me add just a few thoughts about the situation. The situation is, I think, exceptionally complicated because at least three different things are going on. First of all, there's a cyclical transition from a period of above-trend growth to what we would hope would be a period of trend growth, the normal soft-landing problem. Second, we essentially have a supply shock. It's not exactly a supply shock because it has complicated elements to it, but oil prices and commodity prices are rising significantly, and that is creating a worsened tradeoff. Third, we are having a housing cycle that has a certain autonomous component to it because it's like any other asset-price correction taking place on its own schedule, so to speak, and it is interacting with the other two forces. So given these three things occurring at the same time, the situation is obviously very complicated.

Now, the ideal situation would be for us to move to a steady, sustainable pace without inflation. Right now, the biggest risk to that steady pace seems to be the pickup that we've seen recently in inflation. The main point I want to make about inflation—many points have already been made—is that it really is quite broad-based. I think there are good reasons to downweight, to some extent, owners' equivalent rent. It is arguably a cost of living; however, the effects of monetary policy on this kind of cost of living are somewhat ambiguous. So we could get ourselves into a bad situation if we focus on it too much. But having said that, if you slice, say, core PCE in any other way—if you look, for example, at core PCE prices excluding OER, at core goods, at core PCE services excluding OER, at market-based core PCE less OER, at any of these ways of slicing inflation—you get a similar pattern in terms of the three-month, six-month, and twelve-month averages, which suggests a broad-based acceleration and one that I think we should be concerned about. We should also note that the three-month total PCE inflation rate is 5.2, which is significant because it influences inflation expectations overall.

Now, a concern that we all have—and many people expressed—is that we don't fully understand why this sudden acceleration is taking place. Some of the possibilities are, first, the supply-shock increases of energy prices; second, the tight product markets; and third, changes in inflation psychology, perhaps related to headline inflation. I guess I would just raise the possibility that these three things are interacting. Perhaps with tighter product markets it's easier to pass through your energy costs or your commodity costs. That pass-through interacts with higher inflation psychology, and there's maybe a vicious cycle there. The thing we should be concerned about is whether those higher prices then lead to higher wage pressures in an inverse kind of spiral. So I do have concerns about inflation, although I don't want to exaggerate. I think we're still looking at numbers that are historically not extremely high.

The other big issue is the housing cycle. I'm going to give us a bit of perspective. It is a good thing that housing is cooling. If we could wave a magic wand and reinstate 2005, we wouldn't want to do that because the market has to come back to equilibrium. The level of activity now is about a third bigger than it was in during the boom in the late 1990s. The housing construction industry is large, bigger than historically normal, and a controlled decline in housing obviously is helpful to us at this stage in bringing us to a soft landing in the economy. But as people have pointed out, the cooling is an asset-price correction. Like any other asset-price correction, it's very hard to forecast, and consequently it is an important risk and one that should lead us to be cautious in our policy decisions, as we'll talk about tomorrow.

Another potential nonlinearity is in financial markets, as we've seen recently. We don't have a good understanding of how changes in interest rates are affecting risk reduction and positions in financial markets right now.

Just a bit of commentary on consumption: A lot of our uncertainty—I guess you'd call it model uncertainty—is the question about how a decline in housing prices will affect consumer spending. The range of views is wide, some arguing that, because of equity withdrawal and so on, the effect would be very large. I don't know the answer to that question, obviously, but I think there are some positive factors that will support consumption going forward. To name a few, the job market remains good, unemployment insurance claims are low, unemployment is low, and I suspect that wages and incomes will start to rise sometime soon. Consumer confidence is not that bad. Gasoline prices are likely to come down. In part, they are reflecting high ethanol prices, which will come down over time. We've seen before that consumer confidence can be very sensitive to gasoline prices. Balance sheets remain reasonably healthy. Even if housing prices flatten out, people have accumulated a lot of equity, and the implication of that is that they can smooth their consumption through rough times, if necessary, by drawing on that equity. Finally, Kevin and Randy, I think, gave different sides of the surge in tax collections, but on the whole it is probably a positive sign. It probably suggests there is more economic activity than we are capturing.

So let me just conclude by reiterating that we find ourselves in an extraordinarily complicated situation because we have these different themes—the cyclical turning point, the supply shock, and the housing cycle. The implication is that, whatever we do, we're going to have to be very deliberate and careful; but I think we cannot ignore the inflation side of this equation.

Any other comments? Well, thank you again for your patience in a long afternoon. I'm glad this is a two-day meeting. [Laughter] Everyone should have table 1; I don't expect significant changes before tomorrow. I'll see you tonight at the British Embassy, and we will reconvene tomorrow morning at 9:00.

[Meeting recessed]

June 29, 2006—Morning Session

CHAIRMAN BERNANKE. Good morning, everyone. Mr. Reinhart.

MR. REINHART.[3] Thank you, Mr. Chairman. As can be seen in the top panel of your first exhibit, market participants marked up their expectations of policy action at this and subsequent FOMC meetings, on net, over the intermeeting period. Apparently, the upward impetus of stronger-than-anticipated releases on inflation and statements by Federal Reserve officials more than offset the drag of readings on economic activity that had a soft cast. The expected path for the federal funds rate over the next two years, the middle left panel, had shifted 25 to 35 basis points by the time of the publication of the Bluebook. In the week since, those expectations edged higher still, with investors sure of a ¼ point hike today and expecting more of the same by autumn. As has been true for a while, the funds rate is apparently seen by investors as trailing off subsequently—with your last ¼ point rise rolling off in 2007.

Three explanations have been offered for this inversion of the money market futures curve, as noted in the middle right panel. The first, which is probably more popular inside this building than outside it, is that it may well be optimal to raise the nominal funds rate in response to a temporary bulge in inflation so as to keep the real interest rate from falling. As inflation recedes, the nominal funds rate can be reduced so as to prevent the real funds rate from rising. Such a path has been a common feature of the Bluebook exercises we've shown you when the Committee is assumed to desire an inflation goal below the prevailing rate of inflation.

The second explanation is based on an assumed nonlinearity in the housing market. Housing demand, some analysts claim, has been importantly buoyed by outsized expectations of capital gains, expectations that for a time have been impervious to the level of the policy rate. In such a circumstance, the FOMC has to tighten to the point that it gets the attention of those investors. But when it does get their attention and housing demand softens suddenly, the Committee will have to change gears quickly.

The third explanation relates to a hardy perennial in FOMC transcripts. Over the years, many of you or your former colleagues have said that your last action in any phase of a policy cycle is always a mistake. And you can't look at the current configuration of futures rates without wondering whether it is happening again. The Committee might, however, be willing to accept tilted odds of over-tightening if that were judged to be the least unattractive alternative. That is, a funds rate a little higher than that consistent with full resource utilization for a time may be seen as the necessary cost of countering inflation that has risen above your comfort zone. Note also that the extent to which markets view you as rolling back some portion of your anticipated 50 basis points of additional firming will lessen the consequences of that near-term policy path for the prices of longer-lived assets and, presumably, aggregate demand.

[3] The materials used by Mr. Reinhart are appended to this transcript (appendix 3).

As can be seen in the second column of the table at the bottom left, the upward revision to near-term policy expectations flattened the yield curve somewhat, with rates on two-year Treasury notes rising 30 basis points compared with the 13 basis point gain in their ten-year counterparts. As the bars at the right show, the rise in nominal rates was more than accounted for by an increase in their real components, especially at short maturities, and inflation compensation edged lower.

This rise in real rates, along with the decline in equity values shown in the bottom two rows of the table, implies that financial market conditions tightened over the intermeeting period. As shown in the top panel of exhibit 2, such a tightening, against the backdrop of weakish data on spending, might incline you to keep the funds rate unchanged at 5 percent today. Such concerns would be particularly acute if you interpreted the anecdotes and survey measures of participants in the housing market (as in the middle left panel, for instance) as suggesting a more pronounced housing slump than embedded in the staff forecast.

But you might see some reason to pause now even if you bought into the basic contours of the Greenbook outlook. Estimated policy rules explaining the Committee's behavior over the past eighteen years that are fed outcomes for inflation and the output gap as in the staff forecast (plotted as the dashed lines in the middle right panel) predict that you will be lowering the policy rate. Similarly, the simulations shown in the Bluebook and repeated in the remaining panel suggest that, with a 2 percent inflation goal and specific assumptions about your preferences, you'd also be satisfied with a funds rate no higher than 5 percent. In that scenario, however, you'd be willing to accept core PCE inflation (the bottom right figure) running at 2⅜ percent for almost one year. Market participants, in part learning from your public comments, evidently view you as unwilling to accept such an outcome. And if your own assessment of the economy has evolved in the same direction as that of the staff, then your near-term policy choices have probably gotten more unpalatable.

As can be seen in the top panel of exhibit 3, the Greenbook outlook for unemployment (at the left) and for core PCE inflation (at the right) has worsened over the course of this year. We tried in the Bluebook to summarize the net consequence of the changes over the past six months in the forces shaping the economy using the FRB/US model. In those simulations, repeated in the middle panel, the policy that best accomplishes the assumed objectives and the resulting macroeconomic outcomes given by the current outlook (the solid lines) are compared with those implied by the extended outlook at the time of the January Bluebook (the dashed lines). In each of these simulations, policymakers are assumed to have a long-run inflation goal of 1½ percent and to place equal weights on the three stabilization objectives: output, inflation, and policy stability. The current outlook implies a funds rate path that peaks a bit above 5½ percent in mid-2007 and then declines gradually to about 4½ percent by 2010, noticeably above the rate call in January.

Another aspect of the changed outlook, this time seen from the perspective of financial markets, is the rise in far-ahead inflation compensation, the red-dotted line in the bottom panel, over the past year. True, you may be heartened that inflation compensation has moved lower since the outbreak of jitters in late April and that, as noted in the inset box, changes in policy expectations prompted by official statements appear to have been associated with a decline in far-ahead inflation compensation. But concerns about investors' confidence in your commitment to price stability, witnessed by the positive correlation of data surprises and inflation compensation over the same period, are probably at the root of a decision to tighten at least 25 basis points today and signal that more may come, the subject of exhibit 4.

As can be seen in the top panel, a ¼ point move today would position the real funds rate more assuredly above the center of staff estimates of its neutral level. And putting some weight on the simulations presented in the Bluebook, if your inflation goal is 1½ percent, as in the middle panel, you may see the need to move the nominal funds rate up from 5 percent sometime soon. Indeed, if you put a particularly high priority of the attainment of that goal—as in the dashed lines—even more tightening is in store.

As shown in the bottom panel, the prevailing market sentiment is toward a ¼ point firming today, which has been a compelling, but not conclusive, argument for action in the past. The key question for each of you is, What probability do you place on another ¼ point firming in August? The solid line in the bottom left figure plots the implied probability currently in financial markets of tightening at both the June and the August FOMC meetings. When drafting the statement, we thought an 80 percent market probability of such a dual action was on the high side of what you would prefer. So, in table 1, which is updated as your last exhibit, we put a few markers to rein in expectations of action in August. Note that the rationale paragraph asserts that growth is moderating and repeats reasons that inflation might be held in check. More important, the assessment of risk is also couched in terms of your goals rather than just the policy instrument. My bet is that, with the release of the statement, the odds would go to 50-50 on action in August, but you should probably view that as no more informative than the flip of a coin.

CHAIRMAN BERNANKE. Any questions for Vincent? If not, then we're ready to start the go-round on policy. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support the alternative B action of 25 basis points and the language in the statement that was passed out last night. Although output has softened, it's not clear how much and for how long. What is clear is that inflation has been running higher. That's a given. That has been in the data.

We've had some warning over the past weeks and months that inflation expectations aren't as firmly anchored as we might have hoped they were. They have come down a bit, but when they've edged back down, it has been largely on expectations that we would be firming at this meeting and on the marking up of our path. So I think it's important to cement that in and to take that action today. It's important to recognize the inflation risks that we all acknowledged in our discussion yesterday.

I think 50 basis points would be too much. The economy is slowing. There has been a considerable tightening of financial conditions over this year. Long-term interest rates are up 50 to 75 basis points over the past six months, including 50 basis points in real rates. This increase wasn't just inflation expectations. Some of the increase has happened over the past couple of months, and I think it's quite likely that we haven't seen the full effects of those rate increases on activity. So we already have some slowing of activity, and I think there's a little more to come, or at least some additional damping from tightening in the pipeline.

We do need to keep our eye on the forecast here. As I said yesterday, a good deal of the inflation increase that we've gotten has been a consequence of energy prices and maybe the price effects in owners' equivalent rent, which are so difficult to analyze and predict. These price effects should dissipate, so I'm certainly expecting inflation to come down as they come out. We need to be careful about inflation expectations and not overreact to incoming data on inflation, but we shouldn't ignore them either. I think that would be a mistake. The whole thing is very uncertain, and I think that inflation, even after a move of 25 basis points, will remain the greatest risk to our objectives, at least until we get much more data that growth indeed is slowing to below potential.

In that regard, I like the elements in the alternative B statement. In paragraph 2, it's important to acknowledge that we recognize that the economy is moderating. That was a prediction last time, and I think we can be confident enough to say it's an actuality this time, to recognize that a lot of that slowing is in the housing market, and to recognize the lagged effect of increases in interest rates. It's important for the rest of the world to know that we have our eye on that.

In paragraph 3, we need, as I said, to acknowledge that inflation has been too high and that there are some things working in a good direction, such as productivity gains and unit labor costs. There is a risk that inflation could remain higher than we want it to.

In paragraph 4, it's important to recognize that the slowing of growth should help to limit inflation pressures, at least keep them from building further, but that our primary focus is on inflation risks. This is a good time to step back a bit from predicting where interest rates are going to go because I think we're less certain about where they are going to go, and so I was glad to see "some further policy firming may yet be needed" was taken out. We still have a prediction in there by saying "the extent and timing of any additional firming that may be needed." It should be clear that in the view of the Committee the next move is more likely to be up than down. But it's a less definitive statement than it was before, and I think it's appropriate to take that slight step back at this time. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. As I said yesterday, although the outlook for real growth is noticeably softer than it was at the last meeting, it doesn't seem to me clearly inconsistent with growth around trend going forward. I see the risk of slowing the economy overly much in the near term by increasing real rates as relatively low.

The way I look at the evidence, real short-term interest rates are still somewhat low by historical standards. If you compare the periods of extended growth, such as the late 1990s, it looks as though they come in between 3 and 5 percent and center near 4 percent or so, although I know there are many ways to measure them. Right now it appears that, by the same sort of measurement, the real funds rate is between 2½ and 3 percent. So I still sense that the real rate is low by historical standards for a period of economic expansion like the one we seem to be in now.

My sense is that we may need to raise rates beyond today because it seems clear to me that we're not pleased with recent inflation or the inflation outlook. The rate of inflation has been substantially higher over the past few months than we would like, and I think the level of inflation expectations is too high as well, although I recognize some of the subtleties involved in gauging inflation expectations accurately. Moreover, inflation expectations appear to be unnecessarily fluctuating; we've been on something of a rollercoaster ride for the past few months. Inflation expectations rose when the public wasn't sure how we would respond to the oil-price shocks, just as they did after Katrina, and inflation expectations came down as they did last October and November only after we communicated our intentions. These ups and downs really serve no useful purpose in my view.

Last night at dinner, Rachel Lomax made a relevant remark about the extent to which their regime anchors inflation expectations and causes firms to adjust to oil-price increases, not by passing through but by cutting wages and costs elsewhere. I think that's a relevant example here. To say that some inflation currently is a consequence of oil-price increases is incomplete, as we all know, because the extent to which oil-price increases pass through to overall inflation is entirely a consequence of the policy reaction function that is either in place or is viewed as being in place by the public.

Now, I'm not going to claim that this is the end of the world. This isn't the 1970s. I think the credibility of our commitment to not let inflation rise to 10 percent is very secure. But we ought to be able to improve upon a policy regime and an accompanying equilibrium in which expectations for ten-year-ahead inflation fluctuate as much as they have over the past several months. So I agree with Governor Kohn that we ought to raise rates at this meeting. We ought to leave open the option in our statements that we could raise rates again. I think it's very important to use today's statement to clarify our intentions regarding inflation; otherwise we're likely to be in for more rollercoaster rides in the months and quarters ahead.

I have two concrete recommendations about the statement. First, note that on June 1 the Chairman characterized recent inflation readings as "unwelcome"—a very important word that harkens back to the word the Committee used in 2003 to communicate a lower bound on the range of inflation rates the Committee considered consistent with price stability. We should use that word again today in our statement to communicate that we do not view current inflation readings as consistent with price stability. I'm afraid that failing to do so would be a glaring omission and would unnecessarily perpetuate ambiguity about our intentions.

My second recommendation about the statement has to do with the assessment of risk, the first sentence in alternative B, row 4, that reads, "Although the moderation in the growth of aggregate demand should help to limit inflation pressures over time, the Committee judges that some inflation risks remain." Placing anticipation of an aggregate demand slowdown front and center in our assessment of inflation dynamics seems odd to me in light of all of the talk around this table over the recent years about how flat the relationship is between aggregate demand and inflation. Moreover, even with the sentence that follows it in that paragraph, it seems to imply that we're willing to simply wait for a moderation of inflation rather than take sufficient action ourselves. Given the Greenbook's forecast, it asks a relatively modest output gap to do a whole lot of work. It also—but this is a sort of broader doctrinal issue—risks leaving the impression that our methodology for controlling inflation is to manipulate aggregate demand, and I'm not sure that's entirely accurate.

The assessment-of-risk sentence in alternative C would be much more appropriate than the first sentence in alternative B. It states clearly what we would like to see happen with inflation: "In order to foster price stability and a sustainable economic growth, the Committee seeks a medium-term decline in core inflation from its recent elevated levels." My sense is that this is something that everyone around the table wants—a medium-term decline in core inflation; if that's the case, we ought to state it clearly to the public. These two changes would send a much clearer message about our focus on inflation risks. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I'll start by saying that I support 25 basis points today. Many of us, including especially the Chairman, helped to shape market expectations that we're going to do that today, and I think not to carry through, given that we shaped market expectations, would be very unfortunate.

Before I get to the statement, I want to try to state as clearly as I can what my position is on the substance of what we ought to do, thinking about the clarity in the formulation of the statement as having to precede the discussion of it with the public. I was struck in our discussion yesterday by the differences around the table in the degree of optimism about the real economy. The Greenbook outlook is perhaps on the low side of the range around the table, and some of those who support that view give some weight to the possibility of a weaker outcome than the Greenbook outcome. Others are more optimistic than the Greenbook, and they put some weight on a stronger outcome than even their point estimate. So that produces a range of views about the real economy, but I believe that the range is well within the normal bounds of professional disagreement and well within the normal forecast errors.

Now, how would we characterize our policy stance coming out of this meeting, assuming that we raise 25 basis points? I think that the right way to characterize the stance, and this is what I was trying to say in the memo that I distributed earlier, is that a fed funds rate of 5.25 percent would be a stance of mild restraint. Let me give you just a short list of some of the things that lead me to believe that. This list is in no particular order, although I suppose it's not an accident that I'm going to put money growth at the top of the list. We have slow and, indeed, slowing growth of MZM (Money Zero Maturity) and M2, particularly in recent weeks; I don't put a lot of weight on the short-run information that we get, but what we see is consistent with the view that policy has mild restraint. We've had some persistent increase in real rates of interest this year, particularly, as Jeff Lacker noted, since our last meeting. We've had some modest declines in U.S. equity markets—that is consistent with mild restraint. We've had some dollar appreciation since the May FOMC meeting. We've observed pretty clearly some reduced activity in sectors of the economy that are interest sensitive, particularly housing, and interest sensitivity may have something to do with automobiles as well. There have been some modest declines in commodity prices in recent weeks—again, not very much, just a bit if you look at the chart against the context of what has happened. Perhaps there are some other things that you would want to add to the list, but I don't see anything out there that would be a clear indication on the other side that would say that it is a glaring exception to the list of things that I've given.

So I think we have a stance of modest restraint. It could well be that we will need additional restraint in the future, but we should not have a clear presumption that we will be raising the funds rate in the future. The decision in August should depend on all the information that we get between now and August, and we should not try to build in a particular assumption on the policy decision. In fact, if I were to be as neutral as I can be on this, I would say something like 50 percent odds that we would hold steady in August and 50 percent odds of another 25 basis point raise. You could take the mean of that and say, "Well, let's just be done with it today and raise the funds rate an additional 12½ basis points." [Laughter] But I think that would be pretty silly.

The message we ought to give to the market is that we have mild restraint in place, and we don't know whether or not that will be enough to do the job. But if we get some unfortunate additional news about the current inflation readings, which I think we could easily get, I don't want to be in a position in which I have to prove my manhood, so to speak, by proposing that we have more draconian increases in rates. If we believe that we already have mild restraint in place and over time it is going to be enough to do the job, then we don't want to position ourselves that in response to market expectations we have to act more. Now, I don't know that we have enough in place, but I don't want to have a presumption that what's in place is inadequate at this point.

I think that the inflation we have, including the energy situation, is predominantly from worldwide demand; we're making a mistake if we ascribe very much of it to supply shocks. We've had a very strong worldwide expansion. We know that China is soaking up energy like crazy—that's part of the very strong worldwide demand situation. Of course, some of the Chinese success comes back to produce demand in the United States: They've ordered a lot of aircraft from Boeing, for example.

Now I'm going to get to the statement itself. All the alternatives help to create a presumption about the August meeting. I understand from the paper this morning that the market has now bid into it a probability of a move in August of more like 85 percent rather than 70. That obviously fluctuates from day to day. But we shouldn't produce a presumption. The way to avoid creating a presumption but at the same time to emphasize our concern about inflation is to say, as I suggested in the memorandum I distributed, that we believe that we have mild restraint in place, assuming that that view is accepted around the table (which it may well not be), and that we will act in August on the basis of the incoming information, which may change the outlook that we get. So that's where I come out on this. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker and President Poole have made some specific suggestions. If additional speakers want to comment, that would be very helpful. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. Based purely on the economic data, I consider it a close call between raising the funds rate 25 basis points today and pausing. I definitely think that policy should have a firming bias because inflation is too high. However, I do consider policy to be mildly restrictive, and I see a lot of uncertainty right now about the prospects for both real GDP and inflation.

My preference would be to move up a bit more slowly, if in fact it turns out that we do need to tighten more, in order to allow additional time to assess the economic situation as we go. In other words, the option value of pausing, especially in view of how close the next meeting is, would have ideally, in my view, made it preferable to pause on purely economic grounds today.

There is a wide range of possibilities for the future. I am deeply concerned about the pace of core inflation in recent months, but as I said yesterday, I take comfort from the continued strength in productivity growth, modest increases in wages, and the high level of markups. But it certainly is a possibility that inflation will remain where it is or pick up even more than we have seen so far, and in that case, further action will surely be required to bring it under control. I'm also quite aware of the possibility that output will slow much more than the Greenbook expects and that the rise in inflation we've seen recently will turn out to be a temporary bulge. Financial conditions have tightened considerably, and we may regret not getting off the escalator of raising the funds rate at each and every meeting because, if in fact output does slow down even more than the Greenbook projects, we will probably overshoot the appropriate level of the funds rate, perhaps by a considerable amount.

In response to President Lacker's comment about how we affect inflation, it seems to me that we do affect inflation by manipulating aggregate demand. That is the channel through which monetary policy works. To my mind we have two goals, not one, and we are now in a regime with mildly restrictive policy so that we face a tradeoff between the pace at which we're going to bring inflation back to our target and the path of unemployment along the route.

So although on purely economic grounds I'd prefer to pause at this meeting, I certainly recognize that it would be difficult to leave the stance of policy unchanged at this time. In general, I believe that we should do the right thing, even if it surprises markets, but in this case our public statements seem to have convinced the public that we will raise the funds rate today. If we didn't follow through, there would likely be some loss of credibility for policy. Moreover, as I've indicated, I see today's call as an exceptionally close one between firming and pausing. Therefore, I can certainly support another increase in the funds rate of 25 basis points today.

With respect to the statement, in response to Vince's point about what our policy choice is today, I believe our objective should be to craft wording that lowers the market's assessment of the chance that we're going to move again in August below what it is, which is about 85 percent at this point. The revised statement does an excellent job in accomplishing that, and I endorse the analysis of the statement that Governor Kohn gave as he went through the various parts. I do find, however, that I'm also attracted to the wording suggested by President Poole as an alternative. It's another way to accomplish the same thing, and it has the added attraction of including the statement that we judge our stance after today's move as mildly restrictive. It does open up the distinct possibility of our pausing in August, depending on the information we receive.

To my mind, there is a real policy challenge as we go forward. Policy—I agree with President Poole—is mildly restrictive: The Greenbook forecast has unemployment moving above the NAIRU and inflation gradually coming down. However, assuming that the inflation bulge is not a purely transitory one that will disappear rapidly, the process for inflation to move down is going to take a while. The communication challenge I think we face and will face for quite a while is how we will live through a period in which inflation exceeds our objective. We need to express the idea that that is an unacceptable long-run situation. But I endorse the comments that President Poole made: We have to make sure that every time we receive an adverse inflation reading—and that could occur for quite some time while the medicine of our policy is working—we don't respond by raising the funds rate again.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, I'd like to build on the comments by President Lacker, President Poole, and President Yellen. I want to address the language first and the move second. Following President Lacker's lead of referring to last night's dinner, I want to go back to a statement that Governor King made last week—that the Bank of England's approach is to keep things as simple as possible. They don't say where interest rates will go next for the simple reason that they don't know and it would be quite misleading to pretend otherwise. Listening to my colleagues at the table and addressing President Poole's point and my own concerns, I don't know where we'll go in August. I do think we should keep it simple.

In terms of the wording—and I'll get to the move in just a minute—it strikes me that the first sentence in alternative B as to the rationale is correct and in keeping with what we've heard at this table. I would then move on—I agree with President Lacker—to say what we set out to do. But "ongoing productivity gains" and "contained inflation expectations should restrain inflation going forward" is the wording from alternative C, the second paragraph of the rationale. I don't like the word "readings" because—and President Yellen has made a very good point—we don't want to be viewed as reactive. I'd prefer the word "pressures": "However, recent *pressures* on core inflation have been elevated, which the Committee views as unwelcome." Then I agree with President Lacker—to clarify our intention, I would not use in alternative B the paragraph 4 that we have. I wouldn't use any of it, and I'll come to the reason in a second. I would just say that "in order to foster price stability and sustainable economic growth, the Committee seeks a medium-term decline in core inflation from its current elevated levels."

By the way, I don't like the second sentence of paragraph 4 in the current alternative B because, as a former market operator, I take from it that we intend to raise rates again. The slippage in there revolves around the words "any additional firming" and the word "may." Again, given my background, I read from those words that we're biased toward raising rates again, and I don't think that's where we are. At least that's not where I am. I would also make a plea, which I think I do at almost every meeting, to eliminate from row 5 the words "in any event" and just say, "The Committee will respond to changes."

As to the move itself, the real epiphany I had last night was after dinner driving home. I'm about to go on vacation, and I was thinking about golf—besides the wisdom that I garnered at dinner. In thinking about golf, I was thinking about the U.S. Open. What happened at the U.S. Open was that the fellow who was in the lead, Phil Mickelson, went for broke. The fact is that this is a team sport. (By the way, Mr. Chairman, I want to congratulate you for the way you conduct these meetings, because I really do feel—and I think all of us feel—as part of a team.) But the sequence of events here is that we're going to release a statement after we announce our move, you're going to testify on monetary policy, and then the minutes are going to be released, if I understand the time sequence correctly. The markets look to the Chairman. Even though this is a team sport, you can go back in history, and you can think of various analogies. Just to kill my golfing analogy here, we might consider Paul Volcker as Bobby Jones and Alan Greenspan as an octogenarian Tiger Woods, and so on. Your words will be carefully weighed. In arguing for a sparse statement, I think the market will be focused on what you say, and then it will look at the minutes, and that's where we amplify, if we wish to amplify or respond to incoming data. Just to finish the golf analogy, I think our job in terms of the amount that we move is to put the ball back onto the fairway so you can approach the green. I think 25 basis points is the best alternative, so I support the 25 basis point move, and I would urge you to consider the wording changes that have been put forth by President Lacker and by President Poole. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Is that two-handed? Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Richard, let me just clarify for a second. So you think we should move today but then leave expectations flat, not 50-50 on another increase?

MR. FISHER. I don't know where we're going to go next. I do believe we should move. I also believe, by the way, that the economy is stronger than the Greenbook says. I made that clear in my statement. I was tempted to suggest adding "somewhat" after the word "moderating," but moderating is moderating. I'm not sure where we go next, and I'm not sure that we should signal because I think we don't know. This gets partially at President Yellen's point and certainly to President Poole's point. The wording as it is, Tim, is too directive. Like President Lacker, I would prefer to clarify our intention as it appears in column C here in the fourth box. I don't think we need to say much more and should leave amplification to the testimony and to the minutes. That's my point. Does that answer your question?

VICE CHAIRMAN GEITHNER. Well, I would have a hard time reconciling Jeff's comments with the ones that followed. In some ways we need to make a choice. It may be true that we're not sure at this point what's going to make sense beyond June, but we need to make a conscious choice about what we want to do with the expectations the market now has. Therefore you can't evade that reality. You have to consciously decide what you want to do with those expectations. You have to decide fundamentally whether you want to leave them neutral, push them down, or push them up. I was trying to read where you would be on that spectrum.

MR. FISHER. First of all, we announce a ¼ point move. Second, we say that we are worried—we use the word "unwelcome." The inflationary pressures, the core inflation pressures, are unwelcome. We state very clearly what our intention is, and we state that we're going to respond to changes. I think our action is then addressed in a very straightforward way by the words that we use without indicating that we're likely to move still further, because I don't have the confidence that we will move still further. But we're making it very clear we're not going to tolerate obviously extreme or harsh inflationary pressures that we're seeing in the core.

VICE CHAIRMAN GEITHNER. It sounds as though your objective with those changes would be to push up expectations.

MR. FISHER. No, I don't want to indicate that we're going to move when we're not sure we're going to move.

VICE CHAIRMAN GEITHNER. I would have read the net effect of your proposed changes as pushing up expectations. Even if we're uncomfortable with how much confidence we have about where we want expectations to be, we need to make a choice about what we want to do. And I would have read the net effect of those changes as pushing up expectations or leaving them unchanged.

MR. FISHER. Well, Mr. Chairman, I disagree with the reading. We come from different perspectives. However, we do need to bear in mind that we have this statement, we have your testimony, we have the release of the minutes, and all of those are tools that we should use. Let me just leave it at that.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. Just a factual question. Richard said that the sequence is that you testify first and then the minutes come out. Is that accurate?

MR. REINHART. The minutes are released three weeks from today. Testimony is tentatively scheduled to be the day before and the same day. Is that right, Brian?

MR. MADIGAN. Yes.

MR. REINHART. So the testimony is Wednesday, and the minutes are released Thursday. The first leg of the testimony is on Wednesday; the second leg is on Thursday.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. I don't disagree with the importance of trying to assess the effect of our statement on the immediate post-statement probability that the market places on our move in August. But I'd just point out, by the time we get to August, the effect of intermeeting news on that assessment will in some sense swamp this. How the markets react to that news and how they view us as likely reacting to that incoming news are going to be important. I have expressed some dismay at what has happened between the March meeting and now. I wasn't unhappy with the March-meeting post-statement assessment by the markets. I'm unhappy with the way the markets reacted to the news, how they inferred that we'd react to the news that came in. So I think that, although the focus on what the likelihood is of a move in August is important, I don't think we should lose sight of how we want markets to interpret incoming news and what that means for our policy going forward.

MR. FISHER. The wording in alternative C—which says that, in order to foster price stability, we seek a medium-term decline in core inflation from its recent elevated levels—puts into context, President Lacker, how we're likely to deal with intermeeting data. That's our intention.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. On Tim Geithner's point, we come out of this meeting with a clear asymmetry in the sense that what's on the table for August is either zero or up 25. The question is, what kind of probability of up 25 would we like to encourage the markets to think about coming out of the meeting? I said that I would like it to be sort of 50-50, and let the data between now and August determine the result and not go into the next meeting essentially having created the presumption of up 25. That's my position.

CHAIRMAN BERNANKE. Okay. President Stern.

MR. STERN. Thank you, Mr. Chairman. I favor the ¼ point increase in the federal funds rate at this meeting. There are lots of considerations that go into it, but a principal one in my mind is that it's important, and perhaps essential, to take that action to anchor inflation expectations and perhaps even to reduce them a bit. So that's where I come out on the action.

As far as the statement is concerned, it seems to me that we want to strike some sort of balance between the possibility, maybe the probability, that we ought to increase the funds rate further, perhaps even more than once at subsequent meetings, with the possibility that we may also find it appropriate to pause, perhaps not too far off, partly because of the lags between our actions and their effects and the fact that we've moved quite a bit. I used the language "some sort of balance" because, as I think the discussion has already suggested, it's going to be very difficult to find something that I would consider fully appropriate and that everybody else around the table would find fully appropriate as well. So I would be happy with any statement that strikes that balance in a reasonable way. I think alternative B largely does that, and I can certainly go along with the language in B. I'm going to resist the temptation to fine-tune it, except to tilt at one windmill and say that I wouldn't use the word "unwelcome." If we want to make the point, we should say "too rapid," "too high," "inconsistent with price stability," or something direct. Why we would want to be coy isn't clear to me.

CHAIRMAN BERNANKE. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Given our recent disappointing inflation experience and, more important, our forecast that suggests that inflation is likely to move at least somewhat higher over the forecast period, I'm solidly in favor of a 25 basis point move today. Like some others, I am less sure about the need for further increases at subsequent meetings.

As yesterday's discussion highlighted, our near-term policy decisions look to have become somewhat harder. There is the possibility that output may be slipping to below potential, and inflation has yet to respond in any convincing way to the tighter policy. Like others, even given that possible problem, I am more concerned about the upside inflation risk, given what I consider to be the greater consequences of an unwelcome development on the inflation side. Despite that leaning, I would emphasize the increased uncertainty we now face and the need to maintain some flexibility with regard to our subsequent policy actions.

I want to go back to the last point I made, or tried to make, in yesterday's discussion—the possible policy corner into which we may have unwittingly painted ourselves. Let me explain what I mean by that. In an effort to underscore our individual commitments to low inflation, many—and I think perhaps most—of us have over the last couple of years expressed a numerical range of price inflation that we would consider acceptable over the longer term. While those ranges have not all been the same, 1 to 2 percent on the core PCE price measure has been the most often mentioned and the range many outside commentators have picked up as what they believe us to consider as our informal target. The problem that we now face in my view is that our forecast for inflation over at least the near term, and perhaps extending into the intermediate term depending on how one defines that time period, does not have inflation moving down even to the upper end of that range. I was struck by the tabulations of the forecasts we turned in for the upcoming congressional testimony. Those showed a central tendency of 2¼ to 2½ percent core PCE inflation this year and 2 to 2¼ percent next year. The staff forecasts were even higher, at 2.4 percent this year and 2.2 percent next year. Using the confrontational language of one of my grandkids, I will say, "So?" In other words, what are we going to do about it? I think it's reasonable to expect that people are going to be asking that question of us more and more. More important, we should be asking that question of ourselves.

I find it interesting to think back as to how we may have individually hit upon 1 to 2 percent core PCE inflation as reasonable and achievable. I think it was substantially influenced by our very favorable experience during the 1996 to 2003 period, when we did have the measure comfortably within that range. But a decomposition of core PCE inflation for that period suggests that such a benign experience may have been an aberration. During that period, we experienced significant declines in goods prices, due largely to sharply lower worldwide demand and the persistent downward pressure on goods prices resulting from the emergence of China and other developing economies as goods producers. That pattern of goods price deflation has now changed, and goods prices in the aggregate are now not making a large negative contribution to overall inflation. In other words, it's hard to attribute that brief historical period of low core inflation to our domestic monetary policy—it may have simply been good luck—and I think it's a weak reed upon which to base our longer-run policy response and preference.

The scenario in the Greenbook that has below-trend growth, unemployment above 5¼ percent, and near-term inflation accelerating underscores the difficult policy choices we may face. And the Bluebook's modeling of what will be required to get inflation back under 2 percent is sobering. Yet if we continue to espouse a target range of 1 to 2 percent and do not behave in a way that seems to move us decisively in that direction, then I think we run the risk of a substantial loss of policy credibility.

Finally, alternative C in today's Bluebook table 1 hints at the kind of action and statement language that would seem to be consistent with a commitment to get back well within a range of

1 to 2 percent. I would not advocate that we go there today, but I think that construct serves to remind us of the need to begin to have such a discussion around this table.

With regard to today's statement, I like the way the various drafts have evolved, and I am generally comfortable with the latest alternative B language that we have before us. I was very uncomfortable with earlier language that toyed with the notion of commenting on and forecasting several very specific variables. I would urge us not to use the statement to elaborate on a rationale for our actions or to highlight a particular data series. I believe that's best left to the minutes. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Guynn, I just want to make a comment that, when I give my testimony, I will have the Committee's forecasts for year and a half ahead, which are conditioned on optimal monetary policy; so I'll be able to say that this is what we think we can achieve reasonably over the next year and a half. Any issue of where we may want to be in the very long run is, at this point, I think moot. I take your point that we have not, as a committee, decided even to announce a quantitative price stability measure much less choose a specific one, and perhaps we should be more cautious about that. But in the near term, as Vincent's simulation showed, getting to the 1.5 percent in the simulations takes us five years. We don't want to create an impression that we are trying to achieve that kind of objective in a year or a year and a half, and I will make that point very clear in my testimony. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. With our decision in May to set the federal funds rate target at 5 percent, I felt that we had moved the fed funds rate to a level that was slightly above neutral. I thought at that time that the cumulative effects of our previous actions, along with other elements in the outlook, might enable us to consider a pause at this meeting. Others at that meeting weren't quite as sanguine, and I said at that time that I perceived two distinct positions regarding a rate hike at this meeting—those who were leaning in that direction and looking for the data to talk them out of it and those who were leaning against an increase and looking for the data to talk them into it.

I was in that latter group, and the data have indeed talked me into another 25 basis point increase in our fed funds rate target today. I'm just as wary now as I was in May of pushing the fed funds rate beyond the level necessary to restrain inflationary pressures, but my concerns about the real side of the economy have been trumped by what I perceive as a significant shift in the risk to our price stability objective.

For some time now, I've been expecting to see headline inflation slow down even as we see a drift up in core inflation. We may yet find that some of the influences of energy and housing prices on the inflation statistics are transitory and that they'll wane. Nevertheless, I'm less confident of that position today than I was in May, and I can't comfortably rationalize the recent string of bad inflation reports that we've seen. Fortunately, some of the wobbliness in inflation expectations that concerned us in May appears to have stabilized because of the belief that the Committee will respond to the latest inflation reports with a rate increase today. I think it's important to validate those expectations.

As others stated previously, I'm also not prepared to say with any conviction today what I will be prepared to do in August. As Vincent pointed out, the markets are currently expecting another rate increase in August. I would prefer to see that probability closer to 50-50, and I hope that Vincent is correct that our language is going to move the markets in that direction.

In terms of our statement, I was ready to support President Lacker's two suggestions in the statement, taking "unwelcome" inflation, which appears in both alternatives A and C, and using it in B. But after hearing President Stern's question about what it means, I'm not so sure that I would use “unwelcome” in alternative B. President Lacker’s second suggestion, of taking the first sentence in paragraph 4 of alternative C and using it as the first sentence in alternative B, addresses those concerns. It conveys that the Committee seeks a decline in core inflation, which is more specific than “unwelcome” inflation. Even though I understand that the transmission mechanism of monetary policy is through the slowing of aggregate demand, I would prefer that our statement be more forthright about what we are trying to achieve as an objective. That’s what I think that sentence in alternative C does—it says that we are seeking to foster our objectives of price stability and sustainable economic growth and are seeking to see a decline in core inflation. So my preference is alternative B with a change in the first sentence in paragraph 4. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. I’m in favor of increasing rates 25 basis points. I like to think I’m in favor of it not because that’s what the markets expect but because it’s the right thing to do. At some point, I hope we can surprise the markets by doing the right thing but not having it be necessarily what’s fully expected. I’m in favor of the 25 basis points mostly because I think we need to hedge the bet that slower economic growth will rein in the outsized increases in inflation that we’ve seen prompted in part by jumps in energy costs. But I don’t think we need to start engaging in an all-out war on inflation. We’ve increased rates seventeen times or so, there has been some upward movement in the long end of the yield curve, and we face the risk that we will overdo.

In that regard, I had a really hard time convincing only a bare majority of my Board—and you saw this in action, Ben—to vote for an increase in the primary credit rate on our last telephone call, as most of them see the amount of tightening already in the works as sufficient given what they see as the downside risk to growth. So I am concerned that we could find ourselves overdoing, particularly if we continue on this upward path. Perhaps the greatest challenge we're going to face is figuring out when to stop.

That takes me to President Lacker's proposal and President Pianalto's comments. I'm not one who would like to start a policy that looks to take inflation down to the levels that we saw in 2002 and 2003. President Guynn made very good points about the fact that our experience with very low levels of inflation, a growing economy, and so forth over the past decade or so may have in fact been part and parcel of unique factors at the time. So when I see longer-run inflation scenarios in which you can choose 1½ percent or 2 percent, I really wonder about the sacrifice ratio of moving from 2 percent to 1½ percent and building in a policy pre-commitment to that. If you take the wording in alternative C and match it with some of the language that has been out there recently, you will build into the market an expectation that we are hell-bent on taking the inflation rate down no matter what. That's too much emphasis on one of our goals at the sacrifice of the other. So I think we need to have some leeway in the statement to pause, maybe in August, maybe later.

I'm very attracted to Governor Kohn's parsing of the statement. When I looked at the statement last night, I wasn't anywhere near as inclined to agree to it as I am now after his walking through it. I do think that, by our eliminating some of the language that was there last time, it gives us some flexibility in August. So although there are many ways to shorten it and there may be many ways to make it clearer, I think that editing it at this table does not really help a whole lot. I would be in favor of both 25 basis points and the statement as it now stands.

CHAIRMAN BERNANKE. Thank you. First Vice President Stone.

MR. STONE. Thank you, Mr. Chairman. I support raising the funds rate 25 basis points, both on the merits and for our credibility. On the merits, I think that certainly, as we discussed yesterday, the risks to growth are higher than they were at the May meeting but inflation risk and the recent news on inflation are certainly tilted to the upside. So on the merits, I support an increase. On the credibility side, the markets' expectations are built as much on what we've said as on what they read in the economic numbers, and we need to follow through on those expectations. I think it would be a mistake not to.

Now, as to the wording, I have to admit I've been torn. The simulations that the staff ran were relatively sobering. There's likely a greater probability of needing to raise rates further, but I don't think we're ready to use the language in alternative C; it just doesn't send the right message at this point. I think there is an amount of uncertainty. I could spend a lot of time tinkering with the language in alternative B, but I'm prepared to support the language in alternative B the way it is. Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I'm glad that everyone agrees that the strength of a good committee is for someone to disagree, because my preference, based on the assessment of the outlook, is to maintain the funds rate at 5 percent, and I would vote accordingly if I were a voting member. Even though the financial markets clearly expect a move to 5¼ percent at this meeting, my reading of the evidence suggests that such a move is not necessarily required at this time. Based on what I know, a 5 percent rate is moderately restrictive and will, given time, result in an easing of inflationary pressures as the economy slows in the period ahead. Our challenge should be to maintain this rate as the economy begins to slow, until we have inflationary pressures clearly receding, because there will be pressure to ease as soon as the slowing of the economy intensifies. I think that's where our mistake will be made.

I have every concern about inflation. But the numbers that we're seeing are in the past, they're from policy actions we took in the past, and there's not a lot we can do about them looking backward. We should be prepared to switch: If the economic data show a reacceleration of the economy, then we will have real cause to make a move up. But so long as the economy is slowing and projections show that it is slowing, then we are restrictive—mildly restrictive, as President Poole said—and we should hold firm until we bring inflation down.

I think we are implementing restrictive policy, and what we're choosing today in raising the rates reflects our desire to steepen the projected downward inflationary trend. Our choice today reflects our willingness to increase the risk of overshooting in an effort to decrease the risk of undershooting—that's the tradeoff we're making today. So I would hold off, I would be patient, and I would be firm in keeping the rate at 5 percent until we see the inflation numbers come down—that is, if I were choosing.

In the language, I believe it is important to reemphasize our commitment to price stability. I agree with that. At the same time, I do not think the risks are all one-sided, and I believe we need to state this in the release. For example, I judge that monetary policy is now restrictive or somewhat restrictive, and we should say so. Now, I agree with those who say nineteen people can't write a statement, but that's something we should have in the statement going forward. Moreover, in the current circumstances, I believe it is very difficult to devise forward-looking language that will clearly be understood by the financial markets. Obviously, we're talking about that here and having trouble ourselves. So regardless of the decision at this meeting, I think that it is especially important that we do not, by our choice of language, pre-commit to another increase in August. And I will leave it at that. Thank you.

CHAIRMAN BERNANKE. President Hoenig, I think everyone around the table admires you for your consistent position. [Laughter]

MR. HOENIG. That's a generous word, but thank you. [Laughter]

MS. MINEHAN. Mr. Chairman?

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. I just want to step in and say that I totally agree with Tom Hoenig's statement. At a time when things are so uncertain, it would be really good if all of us could watch the language that we use and not get ourselves into a situation where we feel, which I know I do, pre-committed to something. I'm in favor of this move. I would have been in favor of it probably in any event. But I do think there are reasons to think carefully about the pause that President Hoenig has put on the table and that has been kind of taken out of our hands. We need to be concerned about that at this time.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I agree with the 25 basis point increase that you proposed. Let me make a couple of comments. First, people have used the words "modest restraint," and "mildly restrictive." If we are somewhat restrictive, it's really not very restrictive. We have increased interest rates 75 basis points since January in nominal terms. If you adjust for inflation, that's 30 basis points. Also, if you look at chart 8 in the Bluebook and you look at the current funds rate, because of the increase in inflation we appear to be a little below the equilibrium real fed funds rate today. So I take Don's point that long-term rates have gone up, but on a historical basis they're still quite low, as we all know.

The second point is about the long-term targets. I realize that these are simulations and that they can change, but when you look at the results of the simulations, they are disturbing because we don't reach either target. If you have a 2 percent target or a 1½ percent target, you don't reach it by 2010. So that certainly was disturbing to me when I looked at the results.

I agree with the objective that people have stated. Our objective in the statement should be to leave open the option for August as to whether we want to increase rates 25 basis points, whether we want to pause, or whether we want to increase more or have another increase after that. So we certainly should leave all those options open.

In terms of the specific proposals on the table, I thought that Jeff Lacker's two points were very interesting. You could do both of them, or you could do one or the other. They both accomplish the same objective. Gary made the point that he didn't like the phrase "unwelcome." You could say, "Readings on core inflation have been elevated in recent months, and that's inconsistent with price stability." We could do something like that or "unwelcome." One or the other—Sandy favored the first sentence in number 4—accomplishes the same objective, but I think including one would add to the statement. Finally, I agree with what everyone has said—that the Chairman's testimony, the minutes, and the data that come out are going to have a great impact on the market's expectations for what we do in August.

Just one final little edit: If you go with alternative B, the first phrase in number 4, "although the moderation in the growth of aggregate demand should help to limit inflation pressures," doesn't belong there. I don't disagree with the phrase, but I don't think it belongs in number 4. It really belongs in number 3, and there is a way to work it into number 3 if we start doing that. I just put a marker down that I'd suggest that edit if we get to that point. I think it's part of the rationale, not an assessment of risk. Thank you.

CHAIRMAN BERNANKE. Governor Kroszner.

MR. KROSZNER. Thank you, Mr. Chairman. I, too, support a 25 basis point move at this meeting, and I share the objectives that many of the people around the table have. I think we may have a bit of a disagreement on how to achieve this objective through the words in the statement.

In the first part of the rationale, our talking about the lagged effects of increases in interest rates and energy prices and the cooling of the housing market is an important acknowledgement of what we have been doing and implicitly gets to the point that President Poole made about mild restraint because it is about the effects of our policy on what's happening now and what's going to be happening going forward.

I would prefer not to use the language about mild restraint. First, I agree with the point that it's hard to know exactly how much restraint we have. I think President Moskow made a very good point by looking at the simulations that Vincent has given us to show that such language, at least in some interpretations, would suggest that we're not really having very much restraint. Second, and very important from a communications standpoint, if we say this now, then in the future we're always going to have to characterize how much restraint we are having in the market. So then we have "mild restraint," then we have "modest," and then we take off the word in front. I think it gets us into a very bad dynamic. So I would prefer to leave that idea implicit. It is important to have it in there, through the discussion of the lagged effects of our policy. We could even say "lagged effects of current policy," if we really wanted to emphasize something like that. But I would prefer to go about it that way.

With respect to some of the suggestions that President Lacker has made, I think it's very clear that I very much share his objectives and concerns about unanchoring expectations. In each of the meetings at which I have appeared so far, I have talked about the importance of maintaining credibility and know full well the great costs of trying to reestablish credibility once it is lost. That said, we have to put the movements that we've seen in expectations over the past six weeks in a broader context, and I don't think they've moved all that much. I would prefer them not to be moving up and down; I would prefer that we maintain very clear credibility; but I don't think that they've moved a lot or moved in a way that I consider sufficiently large to be disturbing. So from that point of view, I would be averse to including the word "unwelcome." I consider the word "unwelcome" unwelcome in this statement [laughter] because I don't think we need to say that or convey it in that way here. We can convey it through a variety of other means. But I share the broad objective.

I'm a bit wary of trying to bring in some of the alternative C language into alternative B because I'm concerned about the market's focusing too much on specific measures when we start talking about the medium-term decline in core inflation. There may, then, be an overreaction to PCE numbers or CPI numbers that come out, and that would be a bit of my concern. Something that I very much like in alternative B at the end of the assessment of risks is that we talk about the evolution of the outlook for both inflation and economic growth, which is very much forward-looking and a bit more concrete, which I think is very valuable and helps to clarify our objectives.

Finally, something that Vice Chairman Geithner brought up—I think there's a tension between what some people want to achieve and the language that we're going to use to achieve it. I concur broadly with the comment that a number of people have made—that alternative B will probably bring down the market's odds regarding what we're going to do in August from its recently elevated levels. We're going to be getting some important data. We'll be getting two employment reports, so we'll get to see whether the lower numbers in employment are temporary or not. After we see four or five months of data, we will be able to start pulling out whether something is temporary or not. We have some other important numbers coming up, and so I support basically keeping alternative B as it is. I think that is the best way to achieve the objective of leaving our options open but not in any way unanchoring expectations.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. First, I support the 25 basis point increase at this meeting, and as several people have said, I think the real issue is what we signal going forward. Let me refer to some comments already made and respond to some of my colleagues. President Poole, I'm sort of right where you are: I'm thinking 50-50 going forward, and so I'm leaning toward the neutral language that leaves our options open.

However, I'm troubled, too, as Governor Kroszner just said, about talking about our position as restraint at the moment. I see where we are as having removed the excess accommodation. I'm concerned that if we call this restrictive and if we want to backtrack, it might signal that we're easing up again. I think we're right in the sweet spot, and I don't really want to characterize it one way or another because, again, I think we're where we need to be.

The other comment I would make is that we're still seeing banks loosening lending standards. There's plenty of liquidity out there. As Governor Warsh said yesterday, people are leveraging. Pricing may be restraining, but there is liquidity. Credit spreads are still very, very minimal. From that perspective, the market, given what they're seeing day to day in deal-making, may react by asking how we can call it restrictive.

I like President Moskow's comment about moving up the first sentence of row 4, the first part about the moderation in growth, to the rationale. As we spoke around the table yesterday, we were trying to decide what to do with these signals of inflation—how much of this inflation is transitory and how much will be worked out as housing cools because, again, that is really where the slowdown is coming. The slowdown is coming from housing, but that's what we really wanted to happen. By having the rates rise, we've pulled the hot sector down closer to where we want it to be. If you look at section 3 of alternative B, we really are laying out why we think inflation is headed in the right direction. Productivity gains are still good. Unit labor costs, therefore, have been held down. Inflation expectations are contained. We could add to those points that the moderation in aggregate demand will also help contain inflation. However, we still have other pressures. I think the sentence in row 4 supports that rationale, so I like the suggestion that we move it.

I also agree with the suggestion that we take out the first word in the sentence, "readings on core inflation" and just say "core inflation." I am open to saying "unwelcome"—it serves as a signal that we are anchoring expectations. Some numbers as high as 3.8 are very unwelcome to me, so I would be glad to stick the word "unwelcome" in there.

The only other thing I would say is that in number 4 I would just put a period after "outlook for both inflation and economic growth." To get everybody focusing on the outlook is what we're all talking about. When we say "data dependent," we mean that we need the data to validate our forecast or to modify it. I think the markets look at just the data, and I would just as soon put a period after "growth."

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me support the move of 25 basis points on the merits. I don't feel as though I'm constrained by market expectations for this meeting; rather, on the merits, I think that's the right thing to do.

Before getting into a discussion of the language, maybe I can give a couple of perspectives, Mr. Chairman, on the markets themselves. My sense of things is that a bit of a herd mentality remains in the markets in that they have been waiting for our every utterance and, in some ways, they have been guided by us for a very, very long time. The discussion we're having today is really the tough one because we recognize that we need to wean the markets from the degree of certainty that we no longer possess. I think this discussion is really quite healthy in doing so. In light of that perspective, I think that alternative B strikes the right balance. Without trying to wordsmith the statement at this point, I think that, although I share Vince's view that ultimately the markets will get to a probability for August that is more balanced, it will take some time. That is, I think the markets' first reaction to alternative B and to the various versions that we're talking about will have some "stickiness" to the view that they have now. They will believe that we have stopped giving them guidance, that we've gotten out of that business, and that we are somehow culpable for that. We have led them to the river, and now we are telling them that what they do is really their decision after all. My own view is that this shift is a very, very good thing; but it is not going to be without some pain, and I think swipes will be made at us. The Chairman's monetary policy testimony will perhaps represent just a little bit of that.

But a dispersion of market views as to what we should be doing, what the state of the economy is, and what the prospects are for inflation is a very healthy thing. We will be introducing some volatility into the markets, probably in a more meaningful way than they may have seen, but on balance I think such a shift is all to the good.

With that backdrop—that these markets are not focused on nuance—and the recognition that the discussion we're having is about nuance, let me say a few things in support of alternative B. First, in the rationale section, where we say that inflation expectations remain contained, I think the markets will take a couple of shots at us and say, "Boy, you said they were contained previously. You say they're contained now. What was all that that we heard in between?" The way that I get comfortable with the statement that inflations expectations are contained is that some of the movements in the markets, in the inflation surveys, in the TIPS markets, and in the commodities markets show they have been responsive to our views. I also feel that we can honestly describe them as being contained, but the container may be bigger than we had said it was before. [Laughter] I guess I'm not troubled by that. If we introduced language such as "unwelcome," the markets would take it as a reprise of the Chairman's remarks from a few weeks ago and would take the view that we were anticipating that they move up the fed funds futures markets for August. I think that view would be very problematic in light of what I hear is the central tendency of people's views here—that we want that bet to be fairer, closer to 50-50, and I fear that our historical use of "unwelcome" would go against what we're collectively trying to accomplish.

Let me make another comment, about the assessment of risk where we say, "The Committee judges that some inflation risks remain." I think that people in the markets are going to focus on the word "some." "Some" in recent meetings has meant some further policy firming—that is, more than one move; "some" was a strong word. In this context, after some time and understanding, which will not be at 2:16 or 2:30 or even today or tomorrow, they're going to recognize that "some" actually weakens the statement somewhat. Saying "some inflation risks remain" rather than "the Committee judges inflation risks remain" will, on balance, modestly lower the fed funds futures for August and beyond and will more likely bring us back to a point where we will have a fair fight come our August decision. I think that taking out "some" is likely to be a good change. So, on balance, Mr. Chairman, I support alternative B. Some of the suggestions that have been made about how to characterize our views vis-à-vis neutrality and whether or not we're mildly restrictive strike me as leading to a discussion in the markets that might not be terribly helpful at this time. Our walking away from what the markets perceive to be firm and obvious guidance is a bigger move for them than I think this discussion may be suggesting, and I'd rather not add a new notion of neutrality, and a discussion about whether we are less loose or more tight strikes me as inopportune at this moment.

I concur with a comment that President Yellen made at the outset about thinking about our August decision with an option model theory approach. This approach is basically that we don't want to exercise that option until we have to. Alternative B preserves our options, on balance, for a fair fight and a fair discussion come the August meeting. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Just very quickly, I think we should remember that the core PCE index comes out tomorrow. If that's an unfortunate number, it's going to be right up against what we say, and people might say, "Some inflation risk? We've got a bad number. Where are these guys anyway?" So I would vote for taking the "some" out and for saying, "Inflation risks remain."

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I would read our discussion yesterday as implying a central tendency to our forecast of an economy that's growing basically at potential over the forecast period with a trajectory for inflation that is higher than we'd like if it were to extend over time and that moderates slowly and modestly over that period, and the risks of that forecast are still slightly to the upside. Even if we were all quite confident about that basic forecast and had the same view of the risks around it, we couldn't say that we actually know at this point how much more tightening we will need to achieve our target.

I think it's obvious that we should move today. I think we need to send a signal that we want the fed funds rate to have a positive slope going forward. Achieving the probability of 50-50 around a move in August would be terrific, but I don't know if we can do that. We want to have as much flexibility as we can have. We want the market's expectations about policy to be responsive to the data going forward, not sticky because of anticipation of what we're going to do; and I think, of course, that we don't want to pre-commit. I believe that alternative B actually does a very nice job of achieving this objective. But it's all about the alternatives, and I think that alternative B, like democracy, is better than the alternatives. [Laughter]

I think we face two types of risk now. One risk, which I think Janet articulated best yesterday, is that we may already be in the midst of what will prove to be a more acute adjustment in housing and a much more dramatic response by households to the change in expectations about future income and wealth and that the saving rate has been unsustainably low and will have to rise more significantly. That is a plausible scenario going forward. A second risk is that, under an expectation that we stop at 5.25, we may be left below the optimal path for policy. I want to say two things emphasizing that risk, even though I don't think we can judge it as the predominant one. First, to echo what I said yesterday, if you look back at where we thought we would end and where we thought prevailing estimates of the neutral rate were, we have been way under and the market has been way under. The Bluebook estimate of now-prevailing equilibrium illustrates a basic 200 basis point move in estimated equilibrium over this period, and the market's expectations of the terminal rate have moved a lot. So we may have been too loose for too long, and we may have to do more moves to adjust for the effect that our stance has had on inflationary behavior, inflation acceptance, psychology, and momentum.

The optimal control exercise—and I thought the memo that you gave us before the meeting was very helpful—left me a little troubled because you can read those exercises as saying that, if our objective for inflation really is 1.5, we're going to have to be tighter than 5¼ percent; and if you relax the assumption around smoothing, you get a significantly higher near-term path for the fed funds rate that is judged to be optimal.

But even with that, those exercises imply a view about inflation persistence that says we're going to be above 1.5 percent for a very, very long time. That situation, as I said, does create some risk that people will read the persistence of inflation as implying that we have higher inflation tolerance than we do or it may make us vulnerable to some further gradual erosion in credibility. So it's possible that we're going to need to be higher than the funds rate path assumed in the Greenbook, but we just don't know, and we don't need to make that judgment today. We do not want to try to cap expectations at any particular level and hold them down.

Just a few things on the suggestions made. All the suggestions were very thoughtful, but I would oppose all of them. [Laughter] The rise in core inflation would be unwelcome if it was sustained or if it represented an expected path for inflation that was significantly higher than the central forecast. To say that a bulge like the one we've seen today, given what we think is driving it, is unwelcome increases our vulnerability to the perception that we're going to be a little too backward-looking. We need the flexibility to stop at the point where core inflation is still accelerating, and "unwelcome" would limit our capacity to do that.

I think Governor Kroszner was exactly right in resisting the suggestion that we characterize our current stance of policy as somewhat restrictive. We don't know how restrictive policy is; but even if we did, we should not be in the business of calibrating a judgment in our statements about how restrictive we are. Most important, the statement says implicitly what I think, Bill, you're trying to achieve, which is to convey that we see monetary policy as getting some traction on the economy today. We also don't need to be quite as vivid in saying our expectation is to bring core inflation down over the medium term to some implicit level. "Medium term" does have a lot of flexibility in it, but as the optimal control exercises suggest, we don't really know what the costs are of adopting a specific horizon now for bringing inflation down from what is only a very small deviation from our implicit target.

I think that alternative B strikes a good balance now, and each suggestion would alter that balance in a way that would not be as good at capturing the consensus about the trajectory that was described yesterday. So I support moving 25 today and the language in alternative B.

CHAIRMAN BERNANKE. Okay. Thank you all very much. Jeff.

MR. LACKER. Just a couple of comments in response to a few things, if that's all right, Mr. Chairman.

CHAIRMAN BERNANKE. Certainly.

MR. LACKER. First, the statement language that we've been using in row 4 to try to influence the probability that we'd like to see immediately after the statement of the next move has conflated two things. It has combined our assessment of the probability of various data coming in and our intentions about how we're likely to react to those data. As a result, when data come in, they have a short shelf life, and not too far out into the intermeeting period the markets become uncertain because we haven't told them separately what our intentions are, what guides how we respond to the data. That's why I think alternative C, which says something about what we're about, is going to anchor inflation much better.

President Stern, I take your comments to mean that you favor something that's synonymous with "unwelcome" but less coy, and I welcome that suggestion.

We haven't really given Vincent's simulations, and the inferences that we can draw from them about the feasible paths of inflation, a lot of discussion or scrutiny. I'd be interested to know whether the way in which the evolution of inflation expectations is modeled in those simulations is consistent with the possibility of more-sudden and faster changes in those expectations—as we saw, for example, in the middle of 2003 and as seems to have taken place over the last two intermeeting periods, though with small fluctuations. It strikes me that they leave out of the entire simulation the possibility of our communications influencing those expectations in a more rapid way. This is a debate that goes back three decades, and I don't think we're going to settle it here today. But my reaction to those simulations is that it certainly seems plausible to me that we could establish more rapidly in the public's mind our intentions to aim for inflation at 1½ percent. And I don't think we should shy away from attempting to communicate in a way to help that process along.

Stopping when core inflation is accelerating seems to me highly implausible. I doubt that we would be willing to take that risk with the market. That's exactly the problem we ran into in late April with the JEC testimony: In the presence of declining inflation, the thing that people singled out from that statement was the remark that we may pause even if inflation risks are on the high side. That statement probably did more to call things into question in these last two intermeeting periods than anything else. So, again, I think we need to focus on the way markets are going to interpret news coming in and the way they're going to understand how we're going to react. That's why I've been harping on intentions.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Not to beat a dead horse here, but I think we have to be sensitive to the fact that we're going through a very difficult time right now. After two or three years of the market's having a good deal of certainty about exactly what we were going to do, seeing no other path for policy but up from very low levels, we're in an environment in which everybody realizes there's a great deal of uncertainty. I don't think we should extrapolate from the way a particular piece of information is received or remarked upon in this period to our further discussion of where we stand with regard to our statement and the kinds of things that we want to talk about.

Core inflation is a backward-looking number by definition. There will be times in which we will not want to move on our assessment of the forecast even when core inflation is rising, and I don't think that we should view that decision as less of a commitment to inflation but rather as a reasoned balancing of our two goals. Whatever happened after the JEC testimony is more indicative of the period we're going through and less indicative of how we should think about the way in which we communicate. We've got to keep the balance in mind. If we don't keep the balance in mind, I believe we are subject to overreaction, and the economy pays a penalty for that. I don't think we should be insensitive to that.

CHAIRMAN BERNANKE. Well, let me thank you all very much for your extremely helpful and useful comments. I, too, think that we should raise 25 basis points at this meeting. I think it's justified by the basic economic situation. The greater risk seems to be from inflation.

I think also, following some things that President Lacker said, that a credibility–psychology issue is going on here. Late in April, perhaps because of my testimony, we had a small inflation scare. The TIPS spread widened. The commodity prices, metals prices, essentially went vertical for a while. The minutes, my remarks, the remarks of other Presidents and Governors succeeded in bringing those expectations down significantly, even though we had two upside surprises in the CPI during that period. So obviously some connection exists between our talk and market expectations. Having said that, I think we need to do what we say we're going to do.

Now, conditional on what we know today, I should also add that I think we're getting very close to where we need to be. We don't know for sure yet. Obviously we have to look for more information, but in our public utterances going forward we should be somewhat more balanced about the risks and also somewhat more uncertain about where we're going in the future. The risk-management calculations associated with this move are quite difficult. President Poole has mentioned the risk that if inflation expectations get embedded at a higher level, it would be much more expensive to reduce them later than it is to nip them in the bud, so to speak, at this point. That risk argues for moving earlier rather than waiting to see what happens. That being said, I recognize that there are also some downside risks, some potential nonlinearities in housing markets and financial markets. So where I come out is that I think we should move but try to keep our options open and to move slowly if we do move further.

With respect to the statement, I'm the first to agree it's not a work of art. We have a very difficult balancing act here. First, we have achieved some credibility gains in the past few weeks. We'd like to hold onto those or at least as much of them as possible. However, we want to keep our options open for August, and we don't want to generate in the market a fear that we are completely focused on inflation with no regard for output, the other part of our mandate. It's a delicate balancing act to show that we are aware of the inflation situation but that we are not single-mindedly focused on the inflation situation. The statement is designed to show that we are cognizant of the inflation risk. We take note of the elevated readings. We mention that inflation risks remain. We also note, however, that output is moderating and give some reasons for that, and we say in section 4 that the moderation in output will reduce some of the pressure. Obviously there's disagreement about how flat the Phillips curve is, but all else being equal, that will be a factor.

Responding to Governor Bies' suggestion, I think putting that first sentence of section 4 into the rationale in section 3 is more logical, but the way section 3 is structured, first it says, "Here are the things that are slowing inflation," and then it says, "But here's what we're worried about." So if we put it there, it will downgrade it somehow; if we put it in section 4, it will say that we are aware of the output risk. There's also perhaps a subtlety in section 4 that the firming will depend on the evolution of the outlook for both inflation and economic growth. That's actually an adaptation of a suggestion that President Minehan made, and what it does, I hope, is indicate that we're looking at both variables as we make our decision.

So I'm hopeful that this statement will strike the balance between conveying our vigilance, conveying our concern, maintaining our credibility gains, and removing the notions from the market that we are certain we will move in August or that we will pursue inflation single-mindedly at a rapid rate and independent of whatever happens on the real side of the economy.

Again, with respect to some of the suggestions that were made, I think they're all very interesting. President Poole made a very interesting case. I don't think there's a consensus for going to the restrictive language right now. However reasonable it may be in principle to use the first sentence in alternative C, section 4, or to say that readings are unwelcome, I fear it will tip the balance toward a higher probability in August; perhaps this nuance is too fine, but I am concerned about the effect on the markets of perceiving the Fed as too aggressive. There is a new Chairman. They don't know me. As far as they know, I am an inflation nutter, and I want to make sure that they understand that output is one of our concerns.

Those were the main points I wanted to make. Governor Bies suggested striking the last phrase in alternative B, section 4. I don't feel strongly about that. Does anyone have a view on that? Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. I guess I don't have any concern with doing it, except that I wouldn't know how to answer a question about why we took it out of the formulation after having it in for some time. Every change we make to the statement has to meet that test, and I'm not sure how I would explain it, although I think I agree with you, Governor Bies, about the reason for it. But I just don't think the benefits of doing it offset the need for explanation.

MS. BIES. I was just suggesting a change owing to comments from some of the folks trying to interpret us. Whenever a piece of data comes out, the market reacts, and that reaction is part of the volatility. To the extent that the data are anticipated, they are implicit in our forecast, and we don't want to imply that every piece of news changes that. I was just trying to respond to those comments.

CHAIRMAN BERNANKE. Let me say that I hope in my monetary policy testimony to talk a bit about our framework, our focus on the forecast and on the outlook, and the fact that we will not ever respond to any individual number. I would be quite happy to receive any suggestions that members might have about how to explain these issues. We'll be working on that over the next couple of weeks. President Pianalto, did you have a comment?

MS. PIANALTO. Well, just a comment that we've changed "implied" to "determined." Is there supposed to be a difference? Again, it's a nuance, but will people focus on that change of word? Is "determined" stronger than "implied"? That's all.

CHAIRMAN BERNANKE. Yes. It's valid to change the word back to "implied."

VICE CHAIRMAN GEITHNER. That would be fine. Good point, Sandy.

CHAIRMAN BERNANKE. Very good. President Moskow.

MR. MOSKOW. I just want to clarify the point that Governor Bies and I were making. We were suggesting that we move the first half of the sentence in number 4, the clause "although the moderation in growth of aggregate demand should help to limit inflation pressures over time," up to the rationale part. In the last sentence of section 3, you could remove the word "however" and just put that phrase right at the beginning of the sentence. I think the result still would have the same continuity that you want to see in the rationale section, and I think it's more of a rationale point than an assessment-of-risk point.

CHAIRMAN BERNANKE. It is, but logically you would have to say "ongoing productivity gains have held down the rise in unit labor costs, inflation expectations remain contained, and the moderation of the growth of aggregate demand would help to moderate." Then you say "however," signaling that these are the things that we are really worried about—resource utilization and prices of energy. The sentence as it stands signals to me that all these things are working to constrain inflation, but we are more concerned about resource utilization and commodity prices because we put them at the end of the sentence, at the end of the paragraph, giving them the greater emphasis. I think that putting this clause where it is conveys somewhat greater attention to aggregate demand as a new element in thinking about the inflation outlook relative to our thinking at the last meeting. I realize that it's a subtle issue of emphasis, and as I said, I don't think this statement is a work of art.

MR. MOSKOW. Of course, I understand the logic, but if you do put it in section 4, as President Geithner said, it has a tendency to stay there. We have to see what it would look like in future meetings as well. If you then take it out, you have to question why you are doing so.

CHAIRMAN BERNANKE. Well, I think the risk assessment is going to change. We just changed the risk assessment from "further policy firming may be needed" to "risks remain." So I think that structure is somewhat more fluid than the other parts. Governor Kohn.

MR. KOHN. I was going to make the point President Pianalto made.

CHAIRMAN BERNANKE. Good. I would like to put the recommendation on the table for 25 basis points and alternative B as modified by the one word "implied." You can take care of that later, Michelle? Do you have it to distribute? You've distributed it already?

MS. SMITH. We can insert it.

CHAIRMAN BERNANKE. Fine. Could you please call the roll?

MS. DANKER. I'll be reading the directive wording from page 29 of the Bluebook and the assessment of risk from the table that was handed out with Vincent's briefing.

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 5¼ percent."

And "Although the moderation in the growth of aggregate demand should help to limit inflation pressures over time, the Committee judges that some inflation risks remain. The extent and timing of any additional firming that may be needed to address these risks will depend on the evolution of the outlook for both inflation and economic growth as implied by incoming information. In any event, the Committee will respond to changes in economic prospects as needed to support the attainment of its objectives."

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
Governor Bies	Yes
President Guynn	Yes
Governor Kohn	Yes
Governor Kroszner	Yes
President Lacker	Yes
President Pianalto	Yes
Governor Warsh	Yes
President Yellen	Yes

CHAIRMAN BERNANKE. Thank you. We have two very short items. We can perhaps do those, finish the meeting, and then have our coffee. But first, we'll be right back. [Laughter]

[Recess]

CHAIRMAN BERNANKE. All right. Sorry for that interruption. We have a report now from the subcommittee on communications. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I distributed a memo earlier this week, a report from our communication with you about how you would like to proceed going forward. The main thing I'd like to do is hear whether there's any reaction to that report.

Very tentatively, our idea was to cover goals, broad strategies, and philosophy in August. A number of people thought it would be a good idea to start with that. It might provide a framework for further consideration. Then we would move on to the numerical definition of price stability in our two-day meeting in October, which Debbie will talk about in a few minutes. Most people wanted to start with the numerical definition of price stability, both because it would influence a lot of what else would happen and because it reflects on the discussion we've just been having. It's relevant to the way we approach our monetary policy right now and in the immediate future. It will certainly influence some of the discussion we have about what the announcement should say. So a number of reasons were given for starting with that, and we proposed to do it at the October meeting. Does anybody have any reactions? Cathy.

MS. MINEHAN. I certainly think that at the August discussion we need to settle on the policy, the underlying goals, and all of that. I, for one, am looking forward to an October discussion of inflation targeting about as much as I would be looking forward to a root canal. [Laughter] I would be happy to put it off for a standard two-day meeting in January. I know I'm in a minority on this one, but I just wanted to register how much I'm looking forward to this. [Laughter]

MR. KOHN. Root canals save teeth that otherwise would be lost. No gain without pain.

MR. LACKER. You could skip it. You could stay home.

MR. GUYNN. There's another way to avoid that, I can tell you. [Laughter]

MR. KOHN. Any other comments or suggestions about these sorts of near-term paths? Hearing none, we'll do that. From talking with my fellow members of the subcommittee, I'm not sure that there's much background material we could provide for the August meeting. That will be a sort of broad philosophical discussion. If we think of something, we will let you know; or if you folks think of something that would be helpful, please let us know.

For the October meeting, I'll ask the staff to redistribute the material that was distributed in January '05. It was a very complete study of some of the issues involved. We have a number of new members, and some of us haven't looked at it in a long time. After reviewing that material, if we think there is some updating or some further work that needs to be done to inform that October discussion, we ought to proceed from that base. So I'll ask the secretary to distribute the study soon and then ask people to get back to me if they see something else they think needs to be done before October. Thank you, Mr. Chairman.

VICE CHAIRMAN GEITHNER. What does that actually mean we are going to do in August? Are we going to have an existential conversation without facts, just a sort of general discussion about conviction?

MR. KOHN. Several people thought that defining the goals would help structure the rest of the discussion, and they also had some philosophical points they wanted to make. This goes to your existential point, perhaps, about the best general, broad, strategic way of accomplishing those goals. I think it would be useful, and a lot of people thought it would be useful. At least it might not be a long discussion, and we are trying to do it by extending the afternoon—that might shorten it.

[Laughter] We do not have to spend a lot of time, but I think that, if there are issues to get on the table, it would be nice to get them on the table at the beginning of the discussion. President Minehan.

MS. MINEHAN. I know I'm talking too much at this meeting, but with regard to August, I think it's also important—and this was the last item on your outline—to consider communications in a broad context, not in the narrow context of the statement. We communicate in a lot of different ways, and I think we need to recognize that in a deeper way than we have in the past.

CHAIRMAN BERNANKE. That is certainly the intention of the subcommittee. All right. Thank you very much. Ms. Danker.

> MS. DANKER. Just to follow up on the memo that was distributed summarizing the results of the survey on meeting format, that survey revealed a number of areas of clear agreement. The recent format with the separate go-rounds on the economy and policy is viewed as a good one, and there's little appetite for substantial change to the format at least for now, but more give-and-take during the meetings would still be welcome by most. Also, special topics are overwhelmingly considered a good use of time, with strong sentiment for using staff from both the Board and the Banks as well as for allowing enough lead time for ample preparatory work. Finally, there appears to be widespread sentiment for lengthening the amount of meeting time, but opinions are split about whether two-day meetings are the best way to accomplish this.
>
> On this last point, the survey results and subsequent consultations suggest that a consensus could probably be reached around a steady state of, say, four two-day meetings each year. These four would consist of two meetings with special topics (two was, in fact, the modal response to the survey question on that) and then two meetings before the Chairman's semiannual testimonies to allow a more in-depth discussion of the economy and the outlook with the lead-in of the chart show. For 2007, we are thinking of a baseline of two-day meetings in January and June, as those precede the testimonies, as well as two-day meetings in perhaps March and October for traditional-style special-topic presentations. Whenever possible, we would schedule those two-day meetings on Tuesdays and Wednesdays since that was the day-of-the-week option that appeared least distasteful to you in the aggregate. [Laughter]
>
> Now, coming back to the nearer term, as Governor Kohn noted, communications issues are likely to require significant additional meeting time before the end of this year, including perhaps a couple of two-day meetings. Therefore, we would like to add time to the August meeting both by beginning a bit earlier and by extending into the afternoon as much as needed. As long as the policy decision has been completed, the

announcement could be released as usual at 2:15 in the afternoon, even while the meeting remains in session. In addition, we would propose to expand both the October and the December meetings to two days to accommodate the communications topic. Discussions on this topic are, of course, expected to spill over into next year as well, but for now we are not proposing additional two-day meetings for that purpose. Depending upon how the extended one-day meeting in August goes and how the communications agenda itself progresses, there would be various options for setting aside meeting time next year for those discussions.

So, going forward, if you are broadly in agreement with this approach to the schedule, we will be sending to your offices in the next couple of days a proposed calendar of meeting dates for the remainder of 2006 and through 2007. We would request, if possible, a relatively prompt turnaround on identifying significant calendar conflicts because we're receiving numerous inquiries about next year's meeting dates, which would typically have been released by this point.

Also, as to the special topics, we plan to survey you later this year to see what special topics would be of interest for the slots next year. So if you have any specific suggestions to make, please let Vincent or me know before then. Then once the topics are chosen, we propose to use the System Research Advisory Committee to organize the work, with perhaps Board staff leading one special topic effort and Bank staff leading the other.

Finally, thank you also for the additional comments many of you provided on the survey. They will be useful going forward.

CHAIRMAN BERNANKE. Are there questions or comments for Debbie? President Poole.

MR. POOLE. Does your tentative two-day meeting schedule, Tuesday–Wednesday, include the Wednesday right before I think most of us have board meetings? I have noted that, and I think it's a particular problem. I know Richmond has subcommittee meetings of the board Wednesday afternoon, and we do sometimes in St. Louis. I know that there are a whole lot of constraints that make this scheduling extremely difficult. I understand that, and it may be that some of us are going to have to move these committee meetings to after our board meeting. But at any rate, if possible, I think we should try to avoid that.

MR. LACKER. Actually I like missing my committee meeting. [Laughter]

MR. FISHER. What is wrong with Monday or Tuesday in that sense? What makes it inconvenient—because Thursday is a crunch, particularly if you're going to travel a distance.

MS. DANKER. Monday and Tuesday, again, was not the least distasteful option from the perspective of the survey respondents.

MR. REINHART. It was also the most distasteful option from the perspective of staff, both at the Board and at the Reserve Banks, because it does interfere with the briefings many of you receive and just makes our life more complicated. I appreciate that that's not necessarily in your welfare function.

MR. POOLE. Tuesday–Wednesday is fine if it's not right ahead of our board meeting. That's the issue.

CHAIRMAN BERNANKE. Is there a possibility of rescheduling some of the board meetings? Are they inflexible?

MR. POOLE. We've had second Thursday every month for our meeting since day one as far as I know.

CHAIRMAN BERNANKE. I don't want to jump in here, but I suppose that, for the meeting in October, we could check with people about what days the 2007 meetings should be on.

MR. REINHART. We will do our best to solve the over-determined system that you're telling us about.

MS. DANKER. We'll distribute the precise dates in the next couple of days and then please just get back to us.

MR. REINHART. Also remember that Debbie said Tuesday and Wednesday in part because we also have to line it up with the calendar of international commitments, which include

BIS meetings and the annual meetings. So we start with Tuesday and Wednesday, but we may not get there.

CHAIRMAN BERNANKE. I have complete confidence in Debbie and Vincent to solve this problem. [Laughter]

MR. MOSKOW. When will you announce the fact that we'll have a two-day meeting in October and December, and how will you explain it?

MS. DANKER. I think the intention is to package the '06-'07 calendar together. We hope to have clearance from your offices before the end of July, at which point we'll go out with the calendar going forward. I'm sure our Public Affairs colleagues will assist us, explaining the additional meetings later this year on the basis of the communications topic, which I think should be straightforward since that has been in the minutes.

MR. REINHART. Remember that, by the time the calendar is released, the minutes of this meeting, the *Monetary Policy Report*, and the Chairman's testimony will be out, and we already had a marker in the Report to talk about the formation of the subcommittee.

CHAIRMAN BERNANKE. Any other questions? Thank you. The next meeting is on Tuesday, August 8. We are adjourned, and you can all join us for coffee outside.

MS. DANKER. And lunch. [Laughter]

END OF MEETING