

**Meeting of the Federal Open Market Committee  
March 27-28, 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 3:00 p.m. on Monday, March 27, 2006, and continuing at 9:00 a.m. on Tuesday, March 28, 2006. Those present were the following:

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

Mses. Cumming and 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. Alvarez, General Counsel  
Mr. Baxter, Deputy General Counsel  
Ms. Johnson, Economist  
Mr. Stockton, Economist

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

Mr. Kos, Manager, System Open Market Account

Mr. Hambley,<sup>1</sup> Assistant to the Board, Office of Board Members, Board of Governors

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<sup>1</sup> Attended Monday's session only.

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

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

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

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

Mr. Orphanides, Adviser, Division of Monetary Affairs, Board of Governors

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

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

Mr. Perli, Senior Economist, Division of Monetary Affairs, 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. Connolly, First Vice President, Federal Reserve Bank of Boston

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

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

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

**Transcript of the Federal Open Market Committee Meeting on  
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**March 27, 2006—Afternoon Session**

CHAIRMAN BERNANKE. Welcome, everyone. It has been about a year since I've been to one of these meetings, so I'm looking forward to rejoining the conversation. I want to thank everybody for all of the support and good wishes during this period of transition. We have some other new members besides myself today—Governor Kevin Warsh to my left, Governor Randall Kroszner, and First Vice President Bill Stone, who is really not a newcomer.

MR. STONE. No, I'm not a newcomer. [Laughter]

CHAIRMAN BERNANKE. Good. As you know, this two-day meeting has some experimental aspects. Today we'll be focusing on the state of the economy and the economic outlook. Tomorrow we'll focus on the policy issues, and then we'll have some opportunities to talk about the meeting itself—the structure and how we want to go forward. But we'll start, as usual, with the Desk. Dino.

MR. KOS.<sup>1</sup> Thank you, Mr. Chairman. Financial markets were characterized by a continuation of the fairly benign trends that we have observed over the past few months, with narrow spreads, low volatilities, strong equity markets, and flat yield curves—all set against a favorable macroeconomic backdrop.

The top two panels graph the three-month deposit rate for the dollar, the euro, and the yen and the respective three-, six-, and nine-month forward rates. The compression of the dashed red lines toward the cash rate reflects the view of market participants that the Committee is nearing the end of the tightening cycle. In contrast, forward rates for euro-area deposits are rising, and the spread with the cash rate has widened substantially since last fall as market participants began to revise up their forecasts of European growth and the likely path of monetary policy. Indeed, the European Central Bank (ECB) has increased its policy rate twice, by 25 basis points per move, to 2½ percent since December, and expectations are in place for two or three additional 25 basis point tightening steps between now and year-end. Japanese forward rates also rose in anticipation and then with the reality of the Bank of Japan's announcement that it would terminate the quantitative easing policy and go back to targeting interest rates. I'll have more to say about that later.

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

With the increase in U.S. short-term rates and the stubbornness of the long end, the yield curve has stayed flat. The bottom panel graphs the two- to ten-year spread since June 2004, or roughly when the tightening cycle began. The Chairman's recent speech on the subject notwithstanding, market participants remain divided about the implications of the flat, or slightly inverted, yield curve.

Turning to page 2, the economic news coming from Japan has been interpreted as pointing to an improved outlook. Maybe it's not a new era for Japan, but at a minimum it looks like a new chapter for the world's second largest economy. The top left panel graphs the Bank of Japan's current account balances since January 2001. Just about five years ago, the target current account balance (CAB) became the BOJ's chief operating instrument. Although required reserves have been in the range of 5 trillion to 6 trillion yen, the BOJ successively raised its target for CABs to as much as 35 trillion yen. Two weeks ago, the BOJ announced that it would end the quantitative easing policy and go back to targeting the overnight call rate. Most likely it will take about three months for the BOJ to drain the excess reserves in the system. The call rate itself is expected to continue to trade near 0 percent well into autumn. Among the factors that allowed the BOJ to take this step were signs that deflation was ebbing and that bank lending was no longer contracting (as shown in the top right and middle left panels). Meanwhile, the health of the financial system has improved, particularly that of the largest banks, as shown by the middle right panel, which graphs equity indexes for the broad Topix and bank sub-index. Along with forward rates, yields at longer maturities have also begun to reflect this improved picture. The bottom panel graphs two- and five-year yields since 2001. The 2-year Japanese government bond yields about 60 basis points—up from a low of about 3 or 4 basis points in 2002 and 2003. Five-year rates have risen from about 20 basis points at the low to 1.25 percent.

The view is brighter in Europe as well, even if performance lags other regions. European equities have risen broadly over the past fifteen months, as shown in the top panel of page 3. Sovereign yields have risen, though there is still a gap with comparable U.S. yields. The ten-year German bund yields about 3.65 percent, compared with just above 3 percent six months ago. Meanwhile, there are signs of life in Germany—Europe's largest economy—particularly in the export sector. The improved business sentiment is reflected in the steadily rising Ifo business survey in the middle right panel.

With G3 and other major economies such as Canada, China, and India all doing well, it's not surprising that the overall market environment looks favorable. In fact, one has to go far out in the periphery to find any signs of stress. The bottom panel graphs the performance of selected currencies against the dollar through Friday's close. Besides the euro and yen for reference, the other currencies are those that have been mentioned as popular with the investors engaged in so-called carry trades. In the past few weeks, some of these positions have been scaled back, and these currencies have weakened substantially in some cases. Now let me confess that I

hesitated to include this chart. The previous Chairman chided me once for showing a similar chart that included the New Zealand dollar—the currency of a country with a mere 4 million residents. Well, I am probably skating on very thin ice with the new Chairman, now that the kiwi has returned along with that powerhouse the Icelandic krona, the currency of a country with about 250,000 residents or roughly one-tenth the size of Brooklyn. The point is not to suggest that Iceland is on the verge of joining the G7 but rather that the search for yield went to some pretty distant and unlikely places—as we are now discovering. It does raise questions about other sectors that leveraged money went into and about which we don't yet know. The optimistic viewpoint is that carry trades in some of these peripheral markets have been scaled back without broader ripple effects—and that these markets have been repriced to levels that seem more appropriate.

On page 4, the top panel graphs the familiar emerging-market and high-yield spreads since the bull market began in October 2002. The EMBI+ spread continues to narrow to new record lows. Reflecting that benign environment, Mexico and Brazil continued their easing campaigns, and Indian and Chinese equities continued to rally. At the January meeting, I spoke about the bullish factors pushing emerging-market spreads lower. Meanwhile the high-yield index has remained in a range and really hasn't tightened further since early 2004.

The middle panel shows the rating composition of high-yield issuance since 1988. Issuance shot higher in 2003 and 2004—mostly to refinance, to extend maturities, and in general to repair balance sheets. Very little of that was for investment. Issuance fell sharply in 2005 and is running at that pace if one annualizes issuance for the first three months of 2006. That issuance continues to be largely for refinancing debt and increasingly for financing leveraged buyouts, acquisitions, payments of special dividends, and other forms of financial engineering. Some of these are likely to show up as defaults in the future.

Meanwhile, actual defaults—as shown in the bottom panel—are low and show no signs of increasing. Note that defaults typically start increasing a couple of years before the onset of recession, which is not surprising since the weakest corporations are less able to absorb a change in business climate. So if a flat or inverted yield curve suggests possible weakness ahead, the low default rate for this sector is one indicator pointing the other way.

Turning to page 5, I have some words about recent challenges regarding reserve management. Besides the usual anticipation effects that we have seen in past maintenance periods when the market expected a rate hike at an FOMC meeting, the funds rate and our management of reserves in the current maintenance period—which ends on Wednesday—was heavily influenced by reserve management at one large money center bank: the Bank of New York.

In the top panel, the effects of the market's expectation of a policy rate hike at this meeting are reflected in the smooth upward progression in the morning federal funds

rate—shown by the blue circles. At the start of this maintenance period, the funds rate in the morning was right at the current 4½ percent target. Morning rates have risen steadily over the period, and this morning they stood right around the expected new target of 4¾ percent. This pattern reflects the kind of gradual approach to the expected new target that we have seen in most maintenance periods since the start of the tightening cycle in June 2004.

Typically in these maintenance periods, the Desk has tried to lean modestly against the anticipation effects by providing relatively more reserves in the days before the FOMC meeting. But in the current maintenance period, these efforts were overwhelmed by reserve management at the Bank of New York (BONY), which had an unusually high level of requirements. BONY's high requirements—around \$4 billion on a period-average basis both last period and in the current period—resulted from as-of adjustments applied in these two maintenance periods to compensate for its past underreporting of reservable deposits. Its normal requirements are only around \$100 million. In anticipation of higher rates in the latter part of this maintenance period, BONY met virtually all its elevated requirements over the first four business days of the period and then held near zero balances over the remainder of the period. BONY had indicated to us its intention of managing its reserve balances in this way. But for the first couple of days we only partly accommodated their increased demand, in large measure because the amounts seemed implausibly high and also because our experience has shown that banks' stated intentions and actual behaviors don't always line up.

Frankly, we were quite surprised at how inelastic BONY's demand proved to be. Its holdings in the first couple of days effectively created a reserve shortage at all other banks in the system. The funds rate soared late in the day on each of these days, even well above the expected new target level, and there was considerable borrowing at the primary credit facility. Nonetheless, BONY sold very few reserves back into the market. For the next couple of days, then, the Desk elevated its provision of reserves to fully accommodate BONY's stated objectives for reserve holdings. As a result, the funds rate was much less volatile and remained so for the rest of the period, even as morning rates tended to reflect more of the anticipation effects of the expected rate hike.

This episode illustrates the potential effect that just one bank with a large level of requirements can have on the entire funds market when it dramatically adjusts its reserve holdings in a very inelastic fashion. If the Desk is aware of these plans and can have confidence that the bank's actions will conform to its stated plans, then it can compensate in its provision of reserve supply. But it may not always be possible to meet these conditions.

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

CHAIRMAN BERNANKE. Thank you. On the end of quantitative easing, what are the technical barriers to withdrawing the extra reserves that set three months or four months as being the expected time?

MR. KOS. They have a series of operations into the future; they own, for example, Treasury bills that may have certain maturities. They may have repurchase operations, which initially they started with short-term repos, and then they extended the maturity of those repos even as far as nine months, I think, at the far end. So they could take draining actions, but a more passive way would be just to let those operations mature, and then you have a natural drain that happens without taking active steps as it were. So three months is a reasonable estimate for their ability to let a lot of those reserves drain passively without taking overt draining steps, although they may have to do some of that as well if they want to do in about three months. They could accelerate the process, but my sense is that they would rather not.

CHAIRMAN BERNANKE. What does the market make of this “understanding” that inflation is between 0 and 2 percent in Japan?

MR. KOS. I think people are taking the Bank of Japan at its word—that is, the members were polled, and each individual’s understanding of price stability was within that range. They’ve said it repeatedly, and I think people are accepting that it’s not an inflation target per se—although whether it’s more like an inflation goal, who knows? I think that’s one of those subjects that will provide a lot of grist for discussion.

CHAIRMAN BERNANKE. Finally, how much of the movement in the long-term Japanese government bonds reflected inflation expectations? They have inflation-linked bonds.

MR. KOS. They do, and I’m trying to remember what they did. They did widen out somewhat, but very little. But if memory serves me right, I believe that their breakevens were in the

area of 50 to 60 basis points in the ten- to twenty-year period. So there isn't a huge premium built in, at least into the breakevens.

CHAIRMAN BERNANKE. Other questions for Dino? Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Two questions, Dino. On the fed funds rate, I notice we have a high of 6½ percent one day and 5¾ the other. You said there was considerable borrowing. But is the Lombard window still seen as insufficiently available to cap the rate, or is it just that there were hardly any trades up there?

MR. KOS. There were some trades. I think what we've observed at the Desk in talking to bank reserve managers is that some banks are taking us at our word and are not afraid to step up and borrow—and are not afraid to arbitrage against those who still feel the stigma. But, clearly, some banks still think that coming to the window carries a stigma, and so you do have, to some degree, those that are willing to take us at our word and take advantage and those that are not. And a lot of that bias seems to reflect the feelings of senior management. The trader sometimes doesn't want to go to the senior manager and say, "I want to go to the window."

MR. REINHART. I would also point out, Governor Kohn, on the day in which there was trading at 6½, above the Lombard rate, one large money center bank borrowed from the window and then couldn't place it. Subsequently, the bank wound up holding a portion of the funds itself.

MR. KOHN. My second question has to do with New Zealand and Iceland. I guess I thought you ascribed this entirely to an unwinding of the carry trade. But I thought there were other things going on. I thought that there were some very weak data for New Zealand, so that despite the decline in the New Zealand dollar, interest rates actually fell there, and that there was a report from some Scandinavian bank about problems in the Icelandic banking systems. I hesitate to ascribe this situation entirely to the carry trade.



CHAIRMAN BERNANKE. We'd like a full report on the Icelandic— [Laughter]

MR. KOS. I thought that the Committee's patience might be limited. Yes, there was a downgrade by one of the rating agencies of Iceland. There were some concerns about some of the Icelandic banks, and so that seemed to be part of the story. You did have some weak data in New Zealand, and I guess the central bank there is now expected to be easing over the course of the next year. So some other things were going on. Yet another factor affecting New Zealand—which, again, may be more detail than you want—is that Japanese retail investors have been big buyers of these Uridashis, which I know you know about. And some of that money is now flowing back. Thus, a number of factors are affecting it. Again, at the next meeting I will give you a full report. [Laughter]

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. This suggests that the Bank of New York really paid a lot in opportunity costs to hold those reserves early. Is that your sense? And, if so, do you have a sense of why they were interested in paying up to hold the reserves early?

MR. KOS. Well, I guess I would look at it slightly differently. They held the reserves early in the period at a lower rate because they were anticipating that—

MR. LACKER. Yes. But they could have lent them out later in the day at a lot more, right?

MR. KOS. Oh, I see what you mean. Yes.

MR. LACKER. The opportunity cost at the end of the day was pretty high.

MR. KOS. Yes. I can only speculate, but my sense is that they had a plan for how they wanted to manage reserves in the period. They didn't, then, want to game the system as it were, given that they themselves were responsible for some of the issues during this period. So for them

then to take advantage of something that they had created in the first place—that probably isn't something that they wanted to do.

MR. LACKER. Okay.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Well, actually, I'm sorry, but I want to follow up on the zloty. [Laughter] And, by the way, there are 24 million sheep and close to 4 million people in New Zealand. But I'm curious, just thinking about trip wires, one would think, as you said, that as rates rise and with better credits, one would move away from emerging-market currencies. Do you see any undue concentrations, or do you think that this might roll over, say, to the Latin Americans and some others?

MR. KOS. Right now, there are no signs of that. Again, the hard data that we have are limited. So some of this information is anecdotal, and some of it we are reading from price relationships and correlations that we see. Right now, I can't tell you that there is any evidence to suggest that the Latin currencies might be next. The situation seems to have been fairly isolated so far. My point in raising this issue is that, basically, the world looks pretty good right now. Markets look pretty good. Again, you're going to have to go to Iceland to find some signs of strain. So, overall, the picture is positive. But it's useful to remind ourselves that some leveraged money out there has gone off into some fairly obscure places.

MR. FISHER. Mr. Chairman, I'd note that the former president of Harvard is advocating diversifying portfolios in these kinds of currencies.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. This is probably beating a subject to death. But I want to follow up on the Bank of New York situation and the upward tick of the fed funds rate in the period leading up to what the market anticipates will be a change in our rates. If you can remember back to when we didn't provide a lot of guidance, did we have this same kind of thing based on market expectations?

MR. KOS. No. It has been a phenomenon in this sense in this cycle. Governor Kohn will remember better than I do, perhaps. You might have gotten anticipation effects in the day or two before meetings, when there were keen expectations, but you didn't see them on the first day of the reserve maintenance period, which is what we see now.

MS. MINEHAN. Right. And nothing as dramatic. You've talked about this before, but it is quite graphic here.

CHAIRMAN BERNANKE. If there are no other questions, I need a motion to ratify domestic market operations.

SEVERAL. So moved.

CHAIRMAN BERNANKE. Without objection. Mr. Stockton.

MR. STOCKTON. Thank you, Mr. Chairman. I thought that I would address three related questions in my remarks this afternoon. First, how much momentum is there in current economic activity? Second, how close is the Committee to having put in place sufficient restraint to prevent output from overshooting its potential, with attendant consequences for inflation? And finally, how do we view the current state of resource utilization, and what are the implications of that assessment for the inflation outlook?

Let me turn first to the question of momentum. At the last FOMC meeting, I indicated that the staff was in a state of denial concerning the meager 1 percent rate of increase in real GDP that the BEA had just published as their advance estimate for the fourth quarter of last year. We were skeptical that the growth of output had actually been that weak, and we thought that growth, to the extent it had been soft, would bounce back sharply in the current quarter. I am relieved to report that subsequent developments appear to have supported that interpretation. We now estimate that growth of real GDP was about 1 $\frac{3}{4}$  percent at an annual rate in the fourth quarter—noticeably above the advance reading and about halfway back to our January Greenbook projection. Moreover, activity appears to be snapping back in the current

quarter. We estimate that real output is growing at a pace of more than 4½ percent this quarter.

Although, in broad strokes, those developments paint a picture close to that which we envisioned in January, we have had our share of surprises to contend with. Most notably, consumer spending and business spending have been considerably stronger than we had projected. Real PCE is projected to have advanced at an annual rate of 5¼ percent this quarter. Some of that strength reflects a bounceback in motor vehicle purchases. But even setting that aside, real PCE appears on track for a 4¼ percent increase in the current quarter, nearly a percentage point faster than we had projected in the January Greenbook.

In the business sector, we are projecting an increase in real outlays for equipment and software of nearly 15 percent at an annual rate in the first quarter. Like consumer outlays, real spending for E&S has been boosted by motor vehicle sales this quarter, and it has received a further bump-up from a recovery in aircraft deliveries. But even abstracting from the jump in spending on transportation equipment, real E&S is expected to increase at a 10 percent annual rate in the current quarter, nearly 3 percentage points faster than we had previously projected.

Our surprises have also extended beyond the spending data. Gains in private payroll employment were revised up in the fourth quarter and averaged about 200,000 per month in January and February—a bit above our expectation. Those job gains, coupled with a higher-than-expected workweek, raised the growth in hours worked in the current quarter to more than 3 percent at an annual rate, nearly 2 percentage points faster than we had anticipated in January. The readings on manufacturing industrial production have also exceeded our expectations. Factory output is now estimated to have increased at a 9 percent annual rate in the fourth quarter and is projected to increase at a 6 percent rate in the current quarter; those increases are, respectively, 1 percentage point and ½ percentage point greater than we had written down in January.

This rather lengthy litany might suggest that the answer to the first question that I posed should be that there is a great deal more momentum to activity than we had earlier expected. But, in fact, for two reasons, I'd characterize the situation as one in which we perceive just a little more momentum. First, we have had some downside surprises as well upside ones. For example, construction activity in the business sector and by state and local governments has fallen short of our expectations. The biggest downside surprise, however, has come from the external sector, where a surge in imports in the first quarter suggests that some of the additional strength in domestic spending was met by foreign rather than domestic producers.

A second reason for not interpreting all the recent strength as added momentum is that we can already see evidence, admittedly tentative, that some of the strength in the first quarter will be transitory. For one, the jump in federal spending in the first quarter mostly reflects a rebound from a low level of outlays in the fourth quarter, and

given this year's federal budget, real purchases should only edge up over the remainder of the year. In addition, some of the strength in the current quarter reflects the effects of favorable weather in January and February on housing construction. And, finally, the data on retail sales, shipments of capital goods, and industrial production suggest that most of the impetus to rapid first-quarter growth in these areas occurred early in the quarter; recent readings have been more subdued.

A bit more momentum in private domestic demands, coupled with higher prices for equities and houses and lower prices for imported crude oil, led us to revise up the growth of real GDP by a tenth both this year and next. But these are really just minor tweaks to an outlook that is much the same as it was seven weeks ago.

If our forecast for the current quarter is close to the mark, the growth of real GDP over the past four quarters will have been 3½ percent—about the same pace that we have averaged over the past two years. To me, that seems like a very reasonable estimate of the current underlying pace of the expansion. The gradual decline in the unemployment rate and the rise in capacity utilization over the past year suggest that this pace has been above the sustainable trend rate of growth, but just by a little.

That assessment helps to explain our answer to the question of how much more restraint will be necessary to head off the inflation pressures that could follow from a serious overshooting by output of its potential. Our answer is not much more restraint—in part because we don't think that the pace of activity will, in fact, need to slow much. We are assuming that the funds rate is raised to 5 percent by May and then is held at that level through the middle of next year. In our view, that will be sufficient to slow the growth of real GDP from its current pace of 3½ percent to a 3 percent rate next year and to tip inflation down. As growth slows slightly below potential and core inflation edges down, the federal funds rate is assumed to be lowered a bit in the middle of next year.

As has been the case for some time, housing is central to our forecast of some modest deceleration of activity. Residential investment has been contributing about ½ percentage point to the growth of real GDP over the past few years. So a flattening out of activity in this sector would, by itself, be sufficient to bring about the necessary slowing in aggregate production. And, roughly speaking, that is what we are forecasting. A few months ago, the deceleration in housing activity that we were projecting was not yet evident in the data. But since then, the data have been providing increasing support for our view that housing is in the process of softening. On net, both new and existing home sales have retreated from last summer's peaks, household sentiment toward homebuying has turned down, and builder attitudes have deteriorated. Even house-price appreciation appears to have slowed in recent quarters—to be sure, not quite as much as we thought it would, but at least it now seems to be moving in the anticipated direction. About the only housing indicator not signaling some softening is the starts figures themselves. However, as I noted earlier, we think that starts were boosted considerably by favorable weather in January and

February, and building permits, which are less affected by weather, are pointing to some fallback in starts in the months ahead.

I'm tempted to chalk this situation up as a victory for the staff projection, where victory is defined as any aspect of our forecast not immediately contradicted by the data. But I'm afraid that there is still plenty of scope for surprise in the housing sector. Last week's reports for February showing an *increase* in existing home sales and a *decline* in new home sales certainly highlight contrasting risks. And although we have been encouraged by the recent slowing in home prices, those data hardly confirm that a deceleration in house prices is under way. Nor, for that matter, do they rule out that we are at the front edge of a more abrupt collapse in prices. Right now, it feels a bit like riding a roller coaster with one's eyes shut. We sense that we're going over the top, but we just don't know what lies below.

It is, of course, an oversimplification to suggest that housing is the only risk to achieving our forecast of a slowdown with only a minimal amount of additional tightening. But housing is prominent because we are forecasting it to break from its steady uptrend of the past few years.

In contrast, the growth of consumption and the growth of business fixed investment are projected to slow only a bit between 2006 and 2007 and to remain on solid upward trajectories. Growth in real PCE is projected to average about 3½ percent over the forecast period. Higher interest rates and waning wealth effects from earlier increases in equity and house prices should act to damp the growth in consumer spending. But a pickup in the growth of labor income and a diminishing drag from higher energy prices on the growth of purchasing power nearly offset those influences.

In the business sector, the growth of fixed investment is projected to average about 6½ percent over the forecast period. It *slows* a bit in response to the deceleration of output and final sales. But a low cost of capital and healthy balance sheets should provide support to equipment spending; declining vacancy rates and ongoing gains in employment are expected to lift office construction; and high energy prices should provide some continuing stimulus to drilling activity.

So housing takes center stage in our projected slowing in aggregate activity, and consumption and investment play small supporting roles. We expect the growth of real GDP by early next year to run about 3 percent, a bit less than our estimate of the growth of potential output. Consequently, by the end of the forecast period, the unemployment rate edges back up toward 5 percent, our estimate of the NAIRU.

This brings me to the third question: How do we assess the current state of resource utilization? In setting our forecast, we are required to take a stand on a point estimate for the NAIRU and potential output. But we recognize, as I'm sure you do, that we are being forced to split hairs here. In reality, the confidence interval around our estimate of the NAIRU is very wide. A 70 percent confidence interval is roughly

plus or minus  $\frac{3}{4}$  percentage point, and a 90 percent confidence interval is about plus or minus 1 percentage point. Moreover, Board staff members have done considerable research that highlights just how tentative real-time estimates of the NAIRU and potential output can be. At this point, all we can say is that you are well within a wide zone of uncertainty as to whether the economy is approaching, has reached, or has already overshot the NAIRU.

Some recent developments could be read as pointing to greater slack than we are currently estimating. The relatively small gains in the employment cost index (ECI) over the past couple of years have been well below that expected by our models, offering the strongest evidence in favor of a lower NAIRU. Other wage and price measures, however, offer a more mixed assessment. Hourly labor compensation, as measured in the national accounts, also decelerated last year to a modest pace of  $3\frac{3}{4}$  percent, slower than the rate predicted by our models. But that came on the heels of a 6 percent increase in 2004 that was above the models, with the pattern between the years likely affected by some large swings in stock option exercises. On average over the two years, this measure of hourly compensation has run a bit above model predictions.

As for price developments, our core PCE equations employing a 5 percent NAIRU were on track until recently. But in the last few quarters, core PCE price inflation has come in a bit below those equations. Thus far, these residuals are small. Moreover, interpreting the reasons for the recent misses is not straightforward. The misses may reflect a lower level of the NAIRU, but they could also be signaling a smaller pass-through of higher prices for energy, imports, and other commodities. And, of course, they could simply be noise. In the end, we thought that we had not accumulated enough evidence against our 5 percent NAIRU to make a change at this point, but we will certainly be monitoring this aspect of our forecast closely in the months ahead.

To be sure, an overshoot of the NAIRU of modest dimensions, even if sustained over a couple of years, would likely result in only a small and gradual updrift in the underlying rate of inflation, given how flat the aggregate supply curve appears to be. Of course, the flip side to a shallow aggregate supply curve is that it would also be more costly to reverse whatever inflation might build up over that period.

All told, we made only minor adjustments to our inflation forecast in this Greenbook, as neither the price data nor the major determinants of price inflation presented major surprises. On net, core PCE appears to be coming in close to our earlier expectations. However, that reflected some small offsetting errors. The nonmarket component of core PCE was higher than we had expected, whereas the market-based component was lower. Because we give a bit more weight to the high-frequency movements in the market-based measure, we are inclined to interpret recent consumer price developments as being a touch more favorable than we had expected. Projected oil prices also have been marked down, especially in the near term, reducing some pressure on business costs.

Working in the other direction has been the reacceleration in the prices of materials and imported goods since last autumn, a further rise in capacity utilization, and a lower unemployment rate. Taken together, these developments caused us to trim a tenth from this year's core PCE inflation and to add a tenth to next year's rate, putting our projection at 2 percent this year and 1.9 percent next year. In sum, our outlook is for pretty stable inflation.

I'll conclude my remarks this afternoon by pointing out some changes that we made in the Greenbook this round, starting with our presentation of the financial assumptions. It has now been seventeen years since the fall of the Berlin Wall and fifteen years since the end of the old Soviet regime, so it didn't seem like rushing things for the staff to engage in little *glasnost* ourselves. Therefore we have now laid out the details of our financial assumptions in the Greenbook. As you know, we had already been moving in that direction, and doing so seemed like a logical and useful step toward greater transparency on our part.

We have also made some important changes in our construction of the alternative simulations and confidence intervals. We are now reporting only the versions of the simulations that employ the Taylor rule. This has the virtues of reducing the number of permutations that we present and of focusing on the ones that seem most relevant—that is, on the simulations in which policy begins to react to the shocks within the simulation period. To further facilitate their interpretation, we have added a chart that presents the baseline path for the funds rate, an accompanying confidence interval, and the policy paths that are generated by the Taylor rule for each of the alternative scenarios. Finally, we shortened the sample period over which we generate confidence intervals for the Greenbook forecast and those that are generated by stochastic simulations of the model. We now start those calculations in 1986, rather than in 1978. When we first started reporting these confidence intervals four years ago, we choose the longer sample on the concern that we couldn't rule out shocks like those experienced in the 1970s. Subsequently, we have had shocks similar to those in that period, and the Great Moderation still appears to be holding. So we think a stronger argument can now be made for using the more recent period. All in all, we hope these changes make the document a little clearer and a little more useful. Karen will continue our presentation.

MS. JOHNSON. We now have complete fourth-quarter data for U.S. trade and the balance of payments. Several elements of those data seem to me to be worth mentioning at this meeting as they correspond to issues with which we have wrestled in putting together the international portion of your Greenbook forecast.

The U.S. current account deficit came in at an annual rate of \$900 billion in the fourth quarter—7 percent of nominal GDP. The jump from the previous quarter was sizable, and the number gives me, at least, a bit of sticker shock. With \$900 billion already recorded, it is not surprising that our forecast for the current account deficit crosses \$1 trillion and reaches about 8 percent of GDP by the end of the forecast period. With the U.S. economy projected to perform well through the end of next



year, we have no reason to expect that the financing of such a large deficit will cause problems in foreign exchange and asset markets. But the risk of such problems is again a factor in the forecast.

The deficit on goods and services, at \$790 billion, accounts for most of the fourth-quarter current account deficit. Of that figure, the non-oil merchandise balance is about 70 percent. The balance on trade in services is actually a small positive. We look for the bill for imported oil and the balance on services trade to change little through the end of 2007. However, we expect that the non-oil merchandise balance will widen significantly over the forecast period, contributing a little more than one-half of the increase in the current account deficit, and that deterioration of net investment income will largely explain the remainder. Net investment income had remained stubbornly positive even as the United States became a large net international debtor. The initial release of fourth-quarter balance of payments data shows a small negative for net investment income. Even if that negative is subsequently revised away, we expect a negative change in the income balance through the end of next year that is almost as large as the widening in the non-oil merchandise trade balance. The decline we anticipate in net investment income reflects both the growing U.S. net debt position and the projected rise over time in the interest rates applied to our net position in fixed-income assets.

The information available to us about the financing of the external deficit for last year as a whole supports our view that there is no basis for expecting an imminent, disruptive consequence for asset markets of the growing U.S. external imbalance. In 2005, private foreign investors made net purchases of U.S. securities that totaled almost as much as the entire current account deficit. This category of financial flows increased greatly from the previous year, consistent with upward pressure on the dollar in exchange markets over much of that time. The appetite of private foreign investors for corporate and municipal bonds was particularly strong. Foreign direct investment into the United States also rose during 2005 to a figure that is quite robust, even if not at the scale of the extremely large inflows in the late 1990s and 2000. The offsetting flows of direct investment abroad by U.S. entities were small, reflecting the temporary, favorable tax break on repatriated foreign earnings.

Reported foreign official holdings of dollars in the United States did increase last year, but at a rate significantly below that in 2004. Of the \$217 billion increase in foreign official holdings reported in the Greenbook for 2005, a very large portion is due to increased official holdings by China. Although official Japanese holdings of dollar assets had significantly risen in 2004, the ending of exchange market intervention by Japanese authorities in March of that year resulted in no further official acquisition of dollar assets last year by them. Oil exporters, particularly Russia, accounted in 2005 for a moderate share of the change in foreign official dollar holdings. All told, foreign official acquisition of dollar assets does not appear to have been a dominant feature in the picture of financial flows painted by the balance of payments statistics for last year.

Beyond the current quarter, our baseline forecast calls for real exports of goods and services to expand at an annual rate of 5 percent. This export growth mainly reflects our outlook for real GDP growth abroad. We project that, over the final three quarters of this year, average real output growth abroad will be comparable to that of the U.S. economy; for next year, we expect foreign growth to exceed U.S. growth by about  $\frac{1}{4}$  percentage point. We see the global expansion as broadly based across regions, with real GDP growth in the emerging market economies significantly faster than that in the industrial countries, but with both groups doing well. We expect that, among the foreign industrial countries, Canada and the United Kingdom will continue to be relatively strong and Japan's recovery will become well established, although its rate of output growth will abate somewhat going forward. Among the Asian emerging market economies, we look for a slowing in the rate of growth from recent rates, importantly in China, but expect that on average those economies will maintain a pace of expansion of nearly 6 percent. In Latin America, we project that our major trading partners will all see solid growth that averages almost 4 percent this year and a bit less next year.

Although the dollar moved up slightly over the intermeeting period, we again forecast some dollar depreciation in real terms, as we remain mindful of the financing requirements posed by our external deficits. Over time, that depreciation should work to boost our real exports, although for the forecast period the lagged effects of dollar appreciation during 2005 are more dominant and the contribution from the dollar diminishes rather than strengthens through the end of 2007. Dollar depreciation should add somewhat to import price inflation this year and next. However, changes in global commodity prices have been sizable and have largely determined the path of nonfuel core import prices. Prices of global nonfuel commodities have ratcheted up further in recent months. Futures prices for these commodities indicate some future flattening, but lagged responses to these increases should boost core import price inflation to 3 percent this year before some deceleration occurs next year.

Our projections for the U.S. economy, for relative prices of nonfuel imports, and for global energy prices combine to imply a rate of growth for real imports of goods and services over the remaining seven quarters of the forecast period that is slightly greater than that for exports. With nominal imports currently more than 150 percent of nominal exports, the resulting implication for the nominal trade deficit is inevitably a further widening. In our baseline for this Greenbook, the contribution of exports to U.S. real GDP growth for the rest of this year and next is, at an annual rate, just a bit more than 0.5 percentage point. The arithmetic contribution from imports varies by quarter, in part because of the way real imports are seasonally adjusted. On average, imports subtract more than exports add, resulting in a net negative contribution to GDP growth from the external sector that is 0.3 to 0.4 percentage point at an annual rate.

CHAIRMAN BERNANKE. Are there questions? President Lacker.

MR. LACKER. Dave, I was struck by the alternative scenario in which productivity growth is slower because, even with the Taylor rule in place, it makes inflation rise rather than nominal compensation growth fall. So I was just wondering, does that result convey a lack of credibility in the estimated Taylor rule, or what do you think is going on there?

MR. STOCKTON. I think it just reflects the fact that these cost pressures develop rather quickly in that slowing scenario and that they are passed through one-for-one into prices, and the Taylor rule is responding slowly to that pickup in inflation. But when you say “credibility” of the Taylor rule, the outcome-based version of the Taylor rule is what we show in the Bluebook. That is not an optimal policy, of course. That is an estimated rule based on past observations about monetary policy responses. So it was just a straightforward mechanical read of what that rule produces.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. I have a comment and a question. Karen, you speak of the capital inflow to the United States as financing the current account deficit. Surely these are simultaneously determined. In addition, I think the shorthand statement is probably better the other way around: The private investors are moving funds not for the purpose of financing the current account deficit but to finance their own investments. That is why they are moving the funds. And it is probably better shorthand to say that the current account is financing the capital account inflow as a consequence of where the exchange rate is bid with the capital flowing in.

My question relates to a different topic—the oil price situation. You hear a lot of market commentary to the effect that maybe \$10 a barrel is in there because of uncertainties about Iran, Nigeria, and elsewhere. When you look at U.S. data, you know that inventory is building—certainly refined products—and clearly you cannot have a \$10 plug in there forever if there is no

supply disturbance. Eventually the inventories accumulate, and the price will weaken. What do we know about petroleum inventories, both crude and refined products, around the world? The Greenbook, Part 2, has the U.S. data, but what do we know about elsewhere in the world?

MS. JOHNSON. I just cannot resist the temptation to make a brief response to your comment, and then I will answer your question. [Laughter]

MR. POOLE. Which is fine.

MS. JOHNSON. You know, one can approach a general equilibrium process in any number of ways, and finding things that are truly exogenous to that process is very, very difficult. So it is certainly true that the capital flows might be exogenous. However, my guess is they are responding to endogenous economic activity in the United States and the way we are behaving. Trade is certainly endogenous. Saving and investment behavior has some exogenous characteristics and some endogenous characteristics. I take your point, but it is still nonetheless true that, even if the rest of the world wants to invest in the United States, if we saved more, we would not have to borrow just because they wished to lend. And our saving more would have an implication for asset prices and exchange rates and incomes that would lead to a generally improved outcome that would, over time, have a different characteristic than the one that we have observed. So no one exogenous thing is driving everything else, and that statement is as true for the capital flow part of the story as it would be to say that the current account is the driver and everything else is in response.

MR. POOLE. I think we are in perfect agreement on the economics. It is just the way in which we are talking about the situation.

MS. JOHNSON. We have very little information on inventories elsewhere. There are data through the International Energy Agency on inventories in countries belonging to the OECD, but they really do not tell us much, and, to be honest, I do not have them with me. The information may

be buried here somewhere, but I do not know that I have it, and I will not take the time to look for it. The picture of where inventories are is generally incomplete, particularly because the major Mideast producers and the major emerging market producers are not reporting their inventories to the OECD. The inquiry is unanswerable.

Now an effort, of which the United States is very supportive, is under way to improve the quality of the data in the energy markets, and that effort may some day speak to the question. Some of these inventories may be in gas tanks next to factories or next to generators; some of them are held in huge tanks in ports. The location varies hugely.

All of that said, I always think that the risk premium in the oil futures curve must somehow resolve itself the way you suggest, but it is not something that happens over a short period of time. The inventory behavior is strategic; it is not the residual. It is every bit as much deliberate as anything else is. And so, as a consequence, when oil supplies seem risky—as, say, the events in Nigeria of last week or the general situation in Iran—people want to hold more inventories. So there may be upward support on that price until inventories reach the level at which people are happy, and then the price might recede; but it is not as if that price increase is somehow a purely financial phenomenon and has no economic consequences. On a fundamental basis, price is driving that inventory accumulation, and it is consistent with the inventory accumulation that people want, given that they perceive supply to be risky.

CHAIRMAN BERNANKE. President Yellen.

MS. YELLEN. I have two brief questions, one for David and one for Karen. To David, my question is whether or not you have changed your assessment of the normal gap that we should expect between the core CPI and the core PCE, since those two measures seem to give rather different readings about the strength of inflation pressures. I have long thought that 0.4 or 0.5 was

the natural differential to expect between those two measures. But it looks as though, at the moment and perhaps going back several years, the average differential between the two measures may have narrowed to something closer to a quarter of a point. We have talked about this as a mystery, but I wonder whether, because it is persistent, we should not be benchmarking our view of the core CPI at a slightly different place than, say, 2 being the equivalent to  $1\frac{1}{2}$  on the PCE.

And for Karen, my question has to do with the evolution of net exports and the difference between your persistent forecast of worsening net exports and the forecast of Macroeconomic Advisers, which you have probably looked at, which projects a turnaround. David mentioned that we only need to see a modest slowing or a downturn in the housing sector to realize sustainable growth going forward. But that assessment is contingent on what's forecast for every other component of aggregate demand. As I compare the Greenbook forecast to Macroeconomic Advisers' forecast, the thing that really stands out, and has stood out for quite a long time, as a consistent, strong difference is the Greenbook's forecast that net exports will be a growing drag on the economy and Macroeconomic Advisers' view that net exports are just poised to turn up. I assume that the difference comes down to differences in your assessments of the effects of past depreciation of the dollar on net exports. My question is, Is that right? I am assuming that you are well aware of this difference, and I am just curious to know what your perspective is on that.

MR. STOCKTON. I will start out with the gap. Indeed, we have been surprised by the strength in the nonmarket component of PCE prices, and in this forecast round, we revised up our implicit projection for that component going forward. Over the next two years, we are looking at a gap that is expected to narrow from where it was, and it is more likely to be  $\frac{1}{4}$  percentage point or so. And, as you know, we do not have a good model for the nonmarket component of core PCE. So much of what we are doing is trying to gauge what that gap has been and where it will be, rather

than modeling it on the basis of an economic behavioral set of equations. Thus I would suggest that we have had in our own minds a slight recalibration of that gap in the direction that you were suggesting, at least for the next two years.

MS. YELLEN. We have noticed a change in the relationship between the core CPI and the chained core CPI, which suggested to us that maybe something is going on relating to substitution bias at the upper level of the index. You focused on the nonmarket component of the PCE, and I wondered if something unusual might be happening with the core CPI relative to other measures.

MR. STOCKTON. That change or, in essence, the weighting bias portion of the CPI, looking at the chain versus the Laspeyres version has that moved around a lot—more so than we had any reason to believe it would when chain weighting was implemented. Again, we have just flowed along with that rather than actually thinking that there has been some fundamental change—that the substitution bias has gotten significantly larger or significantly smaller—but we have been impressed with how much it has moved on a year-to-year basis.

MS. JOHNSON. I don't have as good an answer for you as I wish. One of my concerns for some time now has been that the forecasts I observed from other reputable folk, and Macroeconomic Advisers is among them, do not contain as much deterioration in the external sector as our forecast because I interpret at least one possible resolution of that is that they and others and their customers are going to be surprised when they turn out to be wrong and we turn out to be right. [Laughter] And I ask myself, "What are these people drinking for breakfast?" [Laughter]

I have some papers with me, and I can give you a quick answer. Looking through to 2007, so over the whole forecast, they have lower real imports than we have, yet they have a stronger U.S. growth rate, on balance, and higher exports than we have. Their dollar forecast is about like ours. It has a small dollar depreciation in it. The rest-of-the-world picture is not as fully articulated as ours,

so I cannot really say, but I doubt very much that they have the rest of the world just growing like gangbusters and that just explains everything. I have to assume that down deep they have something structural in their model that is either some combination of less asymmetry in the income elasticities on real imports versus real exports and/or more sensitivity to the exchange rate than the roughly 1 percent elasticity that we have. How much is each of those pieces? I do not know. Let's put it this way: The number they have down here for the annual average for 2007 is below the \$900 billion in the nominal current account balance that we have already achieved. I cannot imagine that anybody looking right now at the global economy thinks that we have peaked in terms of the current account and that we are going to start improving. I cannot imagine why anybody would think that.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. I just want to ask a question related to what Jeff Lacker was asking before. I focused just on the alternative simulations. I focused on the greater cost pressure simulation, which had in the second half of '06 core PCE inflation going up to 2.6 percent and yet the fed funds rate was going up only to 5.1—0.1 over the baseline. And this just did not seem to track with my intuition as to what we would be doing as a Committee if, in fact, we had such high rates of core PCE inflation in the second half of this year. Now, I realize that you said this is based on history and that this is what the FOMC has done in the past, but I would hope that we wouldn't do it in the future. [Laughter] I was wondering whether there is some other way to specify the policy response that might be more helpful to us as we consider what we would do in the future.

MR. STOCKTON. Certainly one option would be to provide some sense of what an optimal policy response would be. A second option would be to use the kind of Taylor rule that we were using previously, which was just a calibrated Taylor rule. We made a conscious decision in some sense not to do that, to try to harmonize what was shown in the Bluebook with what is shown



in the Greenbook. But I am getting some feedback from my customers here today, and I will certainly take that on board.

There are two elements as to why the responses look as small as they do. One is that inflation is extremely inertial. And the policy rule has inertia in it as well. As you know, we did a special presentation to the Committee a couple of years ago on why there are lagged interest rates in policy rules. This rule is one that incorporates a lagged interest rate in it, so it produces considerably more inertia. Obviously our hope is to provide something that you will find both credible and useful, and to the extent that we get feedback from you about what we could improve, we would be happy to make some adjustments in that.

MR. REINHART. Let me just make two other points, President Moskow. The rule itself is explained in the table in the Bluebook, and I would add two more properties that Dave has mentioned. One is that its estimation starts in 1988, and the implicit inflation goal in that rule you, I think, would find unacceptable because it includes a higher-inflation-rate period early in the sample. Second, as Dave mentioned, in fact, there are two lags of the nominal funds rate in that quarterly predicted equation. But I guess the other part of my response is, well, you have not told us what your inflation goal is, [laughter] and so we do not have many alternatives except to look at history to see how this Committee has acted. And if you stretch back long enough to have a satisfactory time period over which to estimate the equation, you are probably going to misspecify what the inflation goal is.

MR. MOSKOW. Well, I know we have not specified an inflation goal, but I certainly think this could be below 2.6 percent because this actually has real rates coming down, as you point out in the alternative simulation.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Dave, my question pertains to the labor market and resource utilization issue. There is a comment in the Greenbook to the effect that the strong labor market will cause labor force participation rates to move up in the short run. While that statement certainly sounds plausible, is there any evidence for that kind of effect?

MR. STOCKTON. No. In fact, we have a slight 0.1 bump-up in the near term in the participation rate, but basically in our forecast the participation rate moves sideways.

MR. STERN. Yes, I saw that in the table.

MR. STOCKTON. And by having the actual participation move sideways to meet our trend that is moving down, we were trying to convey in essence that some implicit tightening is going on there. So, in fact, we felt quite comfortable with what I recognize was a somewhat adventuresome forecast for the trend participation rate, which was to have it go down as much as we do in this projection. But it looked pretty good over the past year as a forecast. Even as the unemployment rate has come down, we really have not seen much of any recovery in participation, which makes us a bit more confident, or at least a bit more comfortable with our forecast, that participation is not going to be headed up significantly.

MR. STERN. Okay.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. I have a question for David and a customer request for Karen. My question to David concerns the elasticity of labor supply within our own borders, and my specific question is the impact of immigration on the NAIRU. I assume that we have had some benefit in lowering the NAIRU based on immigration, and I am wondering, David, if you have begun to calculate what the effect of these anti-immigration bills might be on the elasticity of labor supply.

And my customer request to Karen: One thing that I noticed particularly in reading through the Greenbook, beginning with the domestic section, is that we are hit between the eyes right off the bat with the question of capacity utilization and resource utilization. The international section discussed net exports and growth figures. Is there a way, Karen, that we can over time get a sense of what we get right to at the beginning of the domestic section: the degree to which resources are being utilized outside the United States in a way that affects the decisionmaking of businessmen and businesswomen in the United States? You know that I worry about this dynamic. But I am curious as to whether we can get a measurement of the capacity of others to supply inputs into our economy or processes that not only facilitate economic growth but also affect inflation beyond just the prices of imported goods. I do not see that as much in the international section. I see at least the attempt to get to it, whether or not we agree analytically, in the domestic section.

Those are my one question and my one request, if possible.

MR. STOCKTON. I can give you one answer and one waffle. [Laughter] The answer is “no,” we have not done any calculations to my knowledge of how the pending immigration reform bills would affect the natural rate. I would really want to consult with my labor experts before I even ventured an answer about what the effect of increased immigration would be on the NAIRU. One could imagine that the unemployment rates for those groups are higher than average and that immigration could actually be a factor boosting the NAIRU. However, if immigration is affecting reservation wages of workers who are already here, there might be some movement along the labor supply schedule that could potentially lower the NAIRU. So I guess I don’t want to shoot from the hip on that one. That seems like a pretty hard question, and I’d want to do a bit of thinking about it.

MR. FISHER. Our guys—or at least the researchers we have in Dallas—tell us that a substantial portion of employment growth has been fed by immigration in the United States since

1990. I don't know the specific numbers, but I'm just worried and curious. I have a question about whether cutting off that supply or changing the nature of that supply will affect us and, if so, how.

MS. JOHNSON. I'm just going to waffle right from the very beginning. [Laughter]

MR. FISHER. I hope my question wasn't too waffley.

MS. JOHNSON. I'm not so sure exactly—we will give it thought. There's a fair amount of literature developing about global capacity utilization. Is it defined? We don't talk, for example, about capacity utilization in Oklahoma. We assume that if Oklahoma needs stuff from the rest of the United States, it just gets the stuff, and vice versa. Why is the global economy any different? Is the United States small enough relative to the whole world that it can just do that? That's sort of the epitome of the small open economy model whereby it can buy anything it needs at the going world price and it can sell all it wants at the going world price. But if I take that model as my benchmark, it really does that all through prices. It says that the small open economy can buy imported products, resources, inputs, whatever, just by knowing the prices, and sells to an infinitely elastic demand curve for its output.

So it is certainly true that we have paid attention to things like global commodity prices and global energy prices, as the activities elsewhere in the world have shifted global demand and have moved those prices. It is no end of frustrating to me that the futures markets always say that, however much those prices have gone up—or maybe even occasionally down—over the past so many weeks or months, they are going to flatten starting tomorrow. You just get very little dynamic out of those futures prices. No one is out there thinking about the global economy over the next three years, looking ahead at this, that, or the other thing. On the other hand, we've talked about not using those futures prices, and I don't know whether on our own we have the capacity to do better than those prices. So I'm stuck. But I understand the point, and it is certainly the case that huge

changes—supply shocks to the global economy—are in some sense part of what’s happening and that they ought to have some repercussions for us. Partly, I think, that’s a little bit of what’s going on in this notion of whether pass-through has declined over time.

But we’ll give the subject some more thought, and we’ll see if we can come up with some other sorts of indications, such as bottlenecks, as when the shipping industry was having problems, whether it was just port congestion, huge prices on capacity, or something else. You could trace back bottlenecks, and you could think about the consequences of them for the U.S. forecast, say. But something that is more inclusive than particular bottlenecks for particular kinds of goods is a tougher question.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Dave and Karen, my question is basically to ask you to give me your sense of the risk. In reading the Greenbook, I have a sense that the risk is balanced. I see that interest rates go up and then they come back down. So I understand that overall the risk is balanced in your view. But what do you sense are some of the most pressing risks we have? Because when you look at the alternative scenarios—and they’re very interesting—two of them, the productivity factor and the term premium on the yield curve, seem to have the greatest effect. But what in this outlook do you sense is perhaps our greatest exposure? I think that’s what we’re trying to anticipate—where the economy will be and what may affect it negatively.

MS. JOHNSON. Well, again, over a longer period, I think we face a real energy issue as a global economy. And I find it very hard to believe that energy prices are, in fact, going to be five or six or seven or eight years from now where that far-dated futures price is putting them right now. But I’m sure they’ll go both up and down in between. And for the period over which monetary policy is made, I can’t do better than what the markets are seeing. I am expecting that, over time,

the standard of living of many, many, many people on the planet is going to rise. And I'm assuming that the rise will imply some overall higher consumption of energy per capita and that the higher prices are indeed precisely what we need to stimulate new technologies, to stimulate substitutions in all the right places. It will be because the economy is growing that prices of energy will go up, not because the economy is somehow going to get in trouble.

Other things can also arise. The political situation in China is by no means guaranteed. I may be a bit more concerned than others about this subject, but I see no reason not to think that we'll have another bad hurricane season. I just don't know why people don't see serial correlation in what's going on with the hurricanes. Not only in the Caribbean but around the world, we're seeing more and more weather-driven phenomena owing to the higher temperature in the oceans and various other things.

But I don't see endogenous weaknesses. I think the global economy in a very fundamental sense actually has balanced risks—many of the worst shortcomings in many of the economies with whom we trade, both financially and in real goods and services, have been fixed. I think the conduct of policy is better, broadly speaking. I think we could have a very good five years. I can't put my finger on anything that in the next five years is inevitably bound to cause us a problem. But I think that over some long period, as more and more people have higher standards of living, we are going to have a big change in relative prices. And some economies are going to do a better job of absorbing those relative prices than others. But the U.S. economy might do one of the best jobs in absorbing those relative price changes.

MR. STOCKTON. For my part, the most salient risk that I would note is housing, for a few reasons. One, it's an asset market as well as a natural investment, and I just don't know how to forecast those prices. I think that, in our presentation last June, we made pretty clear just what the

uncertainties are there. Beyond that, I'm not sure what the effects will be if, in fact, there is a correction either on the construction side or on the price side. There are just so many uncertainties. As we've noted in the past, we use a standard wealth effect to calculate the consequences of that. But there could be bigger effects associated with equity extraction. There also could be confidence effects that are difficult to gauge. And so I see big risks on both sides. Obviously, I'd be more worried about the downside risk than the upside risk if we get another couple of years of things going on as they have been going. It means that for a while you'll have to lean a little harder against the strength in housing, but it also means you'll be dealing with potentially bigger consequences when the correction in housing markets occurs.

So looking at the data, I'm feeling comfortable with our basic forecast—that things are tipping down. But as I indicated, we're just really not sure what it's unwinding to—whether it's unwinding to the sort of benign soft landing that we're forecasting. We think that forecast is reasonable. There's nothing in the rate environment or in other factors that makes the forecast look far-fetched to us. On the other hand, one could certainly envision a more painful and bumpier adjustment that will cause bigger problems for the Committee.

CHAIRMAN BERNANKE. Any other questions? All right. We come to the first go-round. Let me remind you that we're going to focus in the first round on the economic outlook and will leave, I hope, the policy discussion until tomorrow.

As you know, there has been interest in increasing the interaction in this round, so I have a few suggestions. First, I will take the liberty of intervening occasionally and raising a question or asking for comment. Second, and this is the risky thing, we're going to allow two-handed interventions. [Laughter] If you would like to comment or ask a question about a colleague's remarks, please raise two hands, and you'll be recognized to make short remarks to be perhaps

responded to. This process may work too well. [Laughter] Therefore, I reserve the right to play traffic cop, and we'll take the whole thing as an experiment and see how it goes. Who would like to go first? [Laughter] President Moskow.

MR. MOSKOW. Thank you. President Guinea Pig right here. [Laughter] The two hands are for comments?

CHAIRMAN BERNANKE. Immediate recognition.

MR. MOSKOW. And one hand is just for recognition.

CHAIRMAN BERNANKE. Right. For your turn in the round.

MR. MOSKOW. Okay. No clarification questions. [Laughter]

CHAIRMAN BERNANKE. If you would like to be recognized immediately out of turn, raise two hands; otherwise, one hand.

MR. MOSKOW. Okay. Well, most of my contacts this time were upbeat about current conditions. Though the Midwest continues to underperform the rest of the nation, the U.S. economy seems to remain on solid footing. So we tried to assess whether the strength in January and February was just a transitory bounceback from the fourth quarter or whether it represents some persistent forward momentum. And while a few contacts expressed concerns about higher energy prices and softening housing markets—as we were just discussing—most pointed to an economy with substantial staying power. A bit of good news is that the Chicago purchasing managers' index, which will be released on Friday, will show a significant increase—from 54.9 to 60.4.

The persistent momentum in the economy appears to be creating some pressure on resources. One example is the airline industry. Business and leisure travel are at very high levels, with strong bookings for the past few months. Load factors are at near-record highs, in part



reflecting a reduced capacity in the industry. There continue to be more reports of fare increases, and surprisingly the increases are now being led by the low-cost carriers.

We're hearing about tightening labor markets. Manufacturers continue to have difficulty finding skilled workers. In the temporary-help area, Manpower—headquartered in our District—said that wage growth is accelerating nationally. Three months ago wages were basically flat on a year-over-year basis. Now they're expecting increases of 4 to 5 percent in the second quarter of this year. Kelly Services, also headquartered in our District, reported steady nationwide increases in the 3 percent to 4 percent range. But both companies noted that labor markets were still nowhere near as tight as they were in the late '90s.

Speaking of labor markets, to update the GM–Delphi–UAW saga, Rick Wagoner, General Motors' CEO, thinks that the GM buyout plan will take the heat off the poor Delphi–UAW relations, lessening the chance of a strike there. He expects a significant number of GM and Delphi workers to sign up for the plan. This will allow them to reduce the size of their workforce more quickly. One aspect of this agreement that parties are not publicizing widely, for obvious reasons, is that GM and Delphi should have more flexibility in hiring temporary workers and outsourcing in the future. The temporary workers will have lower wages, and they won't have the full GM benefit package.

Turning to the outlook, I feel that the near-term risks to the forecast have changed somewhat since our last meeting. On the growth front, I had previously thought that high energy prices and sticker shock from heating bills might damp spending substantially. And on the price front, I was concerned that pass-through of higher energy prices and other costs could boost core inflation and feed through to inflation expectations. Neither risk has materialized so far. Private domestic

demand appears to be growing at a solid pace. The recent price news has been favorable, and inflation expectations have moved little.

So what are the risks now? I do not see many immediate downside risks to growth; to the contrary, I personally think that the risk may have tilted to the upside. It's true that housing appears to be moderating, but the softening seems to be happening much as we expected it to. In contrast, consumption growth continues to be quite strong. This may be a signal that households are more confident about their permanent income prospects, perhaps because of healthy labor markets and the strong underlying productivity growth. If so, then we could be in for some continued robust consumer spending. In addition, growth abroad has improved. Notably, Japan and Europe are showing some life. Thus, we could see more demand emanating from abroad. So in the short term, growth will likely exceed potential. But given a funds rate path like that in the Greenbook, which I would characterize as a touch restrictive, my outlook and the Greenbook's get growth back to potential by 2007.

Despite the recent good readings on inflation, the current strength of the economy is showing through in our simple indicator-based forecasts of inflation. We run about two dozen forecasting models that encompass common statistical indicators of future inflation. These are not structural models. They are simple regression forecasting models that use only current data, and they have no explicit conditioning assumptions regarding future policy, oil prices, or other such factors. And this contrasts with a more structural methodology like the FRB/US model. Nearly all of these indicator models predict some uptick in core inflation over the next two years—not a big one but to something a bit above 2 percent in 2007. Looking ahead, these projections would probably move down with a further string of good news about prices and more-balanced prospects for resource utilization. Nonetheless, given the models' forecasts and the fact that we currently are

operating with very little resource slack in the economy, I see a risk that inflationary pressures will be somewhat greater than what is currently built into the Greenbook.

CHAIRMAN BERNANKE. Do you want to comment on the automobile industry in general and the prospects for production and prices?

MR. MOSKOW. Well, I think that, on the production side, the Big Three producers have slowed down somewhat for this quarter and next quarter compared with last year. I think the sales outlook for the industry is really pretty good. You know, it's about 16.5–16.6 million for light vehicles. And the big issue, of course, is the shift from the Big Three to foreign producers, which is shifting output from the northern part of the Midwest to the southern states. So that's the big, big news in our District. In terms of the contribution to the overall economy, I don't see any real concerns here in '06. On pricing, they say that they are trying to cut back on the discounts that they have been giving, and they have cut back somewhat. But I think the proof will be in the pudding as we get into this year as to whether they can continue that.

CHAIRMAN BERNANKE. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. May I say it's a great pleasure to see you back at the table. And while I hesitate to wish your predecessor's eighteen years of service on anyone, I look forward to many interesting and productive meetings under your leadership.

The latest monthly data show significant strength in activity for the quarter just ending, and I agree with the Greenbook's assessment that this strength represents a temporary catch-up after the weak fourth quarter. I anticipate that growth will likely settle back to trend as the year progresses, especially as the lagged effect of tighter financial conditions damps interest-sensitive sectors. The current risks to this scenario are by now a well-known litany—housing, energy prices, the saving

rate, foreign demand, and term premiums. Overall, I judge the risk to the growth forecast to be pretty well balanced.

I did want to comment briefly on the risks associated with housing. This is the sector that obviously bears close watching because it can represent the leading edge of the effects of the monetary tightening. Thus far, published data on housing starts and permits provide rather little evidence of a significant weakening in construction activity, although other indicators such as home-buying attitudes and new home sales, along with a growing amount of anecdotal evidence, suggest that tighter financing conditions are finally exacting a toll. I think one possible reason that starts and permits have remained so strong is that the inventory margin is taking up some of the slack in demand. Indeed, the stock of unsold homes on the market has now reached quite high levels.

I noted a similar phenomenon in talking to a real estate developer in what has been the sizzling Phoenix housing market. In that market, demand has been so strong that builders couldn't build houses fast enough to satisfy buyers. So delivery times for new homes were very long. And as the demand for new homes has slowed recently, we haven't seen a noticeable change in building activity, but there has been a significant decline in delivery times. As this margin, like unsold inventories, returns to more historical norms, I think that we'll see the moderation in demand show up in new construction numbers as well.

Turning to inflation, I think it's worth stressing how good recent readings have been. Over the past twelve months, core PCE prices are up 1.8 percent, the market-based component 1.5 percent, and the core CPI just 2.1 percent. As I've noted in previous meetings over the past six months, we have been more optimistic than the Greenbook about the prospects for core inflation during 2006. For quite some time now, we have been on the order of several tenths of a percentage

point lower. And I continue to think that core PCE price inflation will come in at about 1.8 percent this year.

As the Greenbook forecast drifts down, I think maybe my stubbornness is paying off. My relative optimism partly reflects my view, based on econometric evidence using data after the early 1980s, that there is little pressure for higher inflation coming from the pass-through of energy prices to labor compensation or core prices. Another important element in my optimistic inflation outlook is inflation expectations, which I consider to be well contained and unlikely to provide significant upward impetus to inflation. At the same time, I think it's important not to ignore the potential adverse inflationary consequences from a resurgent economy.

I realize the link between resource utilization and inflation is a contentious topic. Actually, the Philadelphia Fed's Survey of Professional Forecasters asked its respondents whether they used the concept of a natural rate of unemployment in their macroeconomic projections, and the replies indicate a split of about 50–50. About half the economic forecasters, in other words, use such a rate, and the other half don't. And my guess is that there is also a considerable difference of opinion around this table. Personally, I'm persuaded that excess demand in a market does tend to push up prices and that the domestic labor market is no exception to this rule. I think that the econometric evidence supports that view.

President Fisher has been arguing, and perhaps some others would agree, that what matters is not just U.S. productive capacity but worldwide capacity. I do agree that the world—or, more accurately, the aggregate supply curve—has probably become flatter. But while globalization has had a profound impact on the U.S. economy in a number of ways, I think that there are a number of reasons to doubt that it will overturn, at least completely, the normal historical relationship between domestic labor market slack and inflation. The first point here is simply that many goods and most

services still must be produced in the United States, and so foreign capacity isn't an issue. The second point is that, in order to utilize productive capacity in foreign countries, we do need to run a trade deficit; in principle, such deficits eventually put downward pressure on our exchange rates, which tends to raise the prices paid for imports in the United States. I'm sure this is a topic we will be discussing in a lot more detail going forward.

Of course, the measurement of aggregate excess demand or slack is difficult, and I'm sympathetic to the view that there is no bright red line for the unemployment rate that, once crossed, triggers higher inflation. But by examining a variety of indicators, I think it's possible to get a useful notion of aggregate resource utilization. I would judge that these measures currently fall in a range from a modest amount of slack to a modest amount of excess demand. Specifically, the unemployment rate, the vacancy rate, the employment–population ratio, capacity utilization, and other measures are all within a few tenths, in unemployment rate terms, of full employment.

Looking ahead, with the unemployment rate already at 4.8 percent, I think it's logical to worry that wage and price inflation will rise over time if resource slack diminishes further. And with GDP growth forecast at  $3\frac{3}{4}$  percent this year, a naïve calculation based on Okun's law suggests that the unemployment rate could fall to  $4\frac{1}{2}$  percent by the fourth quarter. In contrast, the Greenbook assumes that the unemployment rate will remain unchanged. The Greenbook inflation projection is, accordingly, more optimistic than a forecast based on the naïve model.

Now, given the importance of the behavior of unemployment to one's forecast of inflation, my staff has been looking at the performance and fit of Okun's law—namely, the relationship between output growth and the change in the unemployment rate. And I think their analysis provides support for the Greenbook assessment. Using a dynamic version of Okun's law that fits exceptionally well after 1961, my staff finds evidence of an error correction between the output and

the unemployment gaps. During 2005, unemployment declined substantially more than a simple version of Okun's law would have predicted. And this dynamic model suggests that, even with fast economic growth, the unemployment rate will likely be pushed up a bit this year, as this unusual decline in 2005 is reversed.

So to sum up, I see steady growth and few pressures for price acceleration.

CHAIRMAN BERNANKE. You address this a bit at the end, but how do you reconcile your optimism about core inflation with the view that you have increasing resource utilization and that it affects inflation?

MS. YELLEN. Okay. I guess my view is that it's a risk, but at the moment, by various measures, we're pretty close to, not beyond, full employment. The unemployment rate has declined unusually rapidly over the last year, but a simple Okun's law calculation—and I think that the staff has commented on this in the past, if I'm not mistaken—would assess the decline we've seen in the unemployment rate during 2005 as especially large, given what output growth was. In that sense, the unemployment rate is now giving us a reading of less slack in the economy than we would get from other indicators. Our forecast is that the mysterious decline in the unemployment rate last year will be reversed so unemployment will hold steady, even with growth at the magnitude that the Greenbook is projecting (around 3¾ percent). That's what the error-correction mechanism is about.

So I'm optimistic about inflation because I see us ending 2006 at roughly full employment, with the unemployment rate in the vicinity of its current level. I'm also optimistic about inflation because we've been persuaded that since the 1980s we've seen very little pass-through of energy-price increases into core inflation. That has been a source of considerably more optimism on our part than on Greenbook's part in that it continues to project pass-through of energy and commodity prices into core inflation through 2006.

CHAIRMAN BERNANKE. Thank you. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. I share the view of most that the slow growth in the fourth quarter of last year was, in fact, a temporary aberration that will be offset by strong first-quarter growth in the neighborhood of 4½ to 5 percent. Auto sales have already bounced back, and defense spending is unlikely to continue declining. And business investment spending looks to be strong. Like most outside forecasters and the Greenbook, our Atlanta BVAR and DSGE models are projecting that GDP growth will be around 3¼ percent or so in the second half of 2006 and into 2007. Our models also have core PCE inflation holding between 1¾ and 2 percent and the fed funds target rate peaking at about 5 percent.

Although I would characterize this outlook as solid, and even encouraging, some significant uncertainties and risks surround the outlook. I'd like to comment on several of those risks and, in doing so, include some observations from our region's experience and contacts that seem to be relevant.

The first set of uncertainties in my own mind revolves around how the residential real estate adjustment will unfold—something Dave and Janet have already talked about. Although the decline in construction and sales and the slowing in price appreciation seem to be orderly so far, there clearly could be a more disruptive set of changes that we do not now foresee. As I reported at our last meeting, we are now seeing some significant downward price adjustments and cancellation of some major condominium projects in our red-hot, speculation-driven coastal Florida markets. At the same time, other markets are seeing more-modest adjustments, and it appears that builders are cutting back in response to demand signals. I don't mean to imply that a major pullback in real estate would cause a precipitous drop in economic growth—that would be inconsistent with most of our simulations and analyses. Yet growth in that sector could slow even more than we now expect,



especially if mortgage rates should continue to increase. Adding to the unknowns with regard to residential construction is the timing of the kick that will be associated with Hurricane Katrina rebuilding. The Greenbook has built in a measurable near-term contribution from that reconstruction, but I continue to believe that we're going to be surprised at how protracted that rebuilding is going to turn out to be.

That brings me to a second concern—our admitted uneasiness with how well we can explain the behavior of long-term interest rates in this cycle, something we talked about earlier but have not done so much recently. Despite the new academic look that I'm working on, [laughter] I don't think I can add any genius to the possible explanations already offered by the current and the past Chairmen, Vice Chairman Geithner, and others. But I was here at the FOMC table for the heyday of the so-called new economy, when we thought for quite a while that we could explain some significantly different behavior, some important elements of our economy, only to learn in hindsight that some of those phenomena turned out to revert to past relationships and past experience. Clearly, an unexpected uptick in the long-term rates, including mortgage rates, would not come as a complete surprise. It would affect both household and business spending. I see it as a risk that we should be careful not to dismiss too quickly.

The two uncertainties I've just talked about represent downside risks to output. There's another development that I think tends to offset those downside worries. Job growth has been strong; in fact, in our region we are hearing more and more reports of shortages of new workers in a number of industries and with certain job skills. At the same time, much has been made of stagnant wages for some workers. My staff has analyzed data on the wages and on the types of jobs being created relative to those being destroyed and has found that, although the wage dynamics did deteriorate between 2001 and 2003, wage relationships have since returned to historical norms.

Moreover, business surveys from both the National Association for Business Economics and the National Federation of Independent Businesses suggest that, although firms put a lid on wage increases during the 2001-04 period, the net projection of firms that are raising wages has become more widespread, and it is now about the same as it was during the 1990s. This rebound suggests to me that wage growth from net job creation is now lending more support to spending than it has in the recent past, taking some of the pressure off other sources of funding, such as home equity extraction.

As our recent post-FOMC meeting statements have indicated, upside inflation risks also remain. It's still not clear to me that we've seen the full long-term adjustment by households and businesses to elevated energy prices. I continue to hear reports of more energy and other commodity cost pass-throughs that people would like to make, and reports of rollbacks of earlier energy surcharges are few and far between.

Although I'm not a proponent of the NAIRU way of thinking about the relationship between unemployment and expected pressure on inflation—a relationship that is hard to see in any recent empirical data—we do need to watch more carefully than ever for new bottlenecks and price pressures in a solid expansion that is now four years old. In fact, even though I see that the risk at our current and expected policy setting is getting close to balance, as a good central banker I remain at least a bit more concerned about the potential for inflation to edge somewhat higher. I will not argue tomorrow for a significantly tighter policy to help push the inflation rate moderately down, within the range most of us have said we view as our objective. But I do not think we want to risk a higher level of inflation at this point and risk having inflation expectations begin to deteriorate.

I believe the kinds of uncertainty that I've just talked about demonstrate that our reading on the path of policy and the proper policy setting over the period ahead has become more difficult to

get just right and more difficult to explain. And I think that suggesting that future policy action will be determined by the evolution of the economic outlook lends credence to the spirit of the recent post-meeting statements. Thank you, Mr. Chairman, and welcome back.

CHAIRMAN BERNANKE. Thank you. President Lacker had a comment.

MR. LACKER. Yes. I apologize. I haven't learned the gestures yet. [Laughter] I didn't practice them before the meeting. President Yellen, I wanted to ask you two things, and they're related in my mind. What's your understanding of why the pass-through correlations declined in the mid-1980s? And second, if the interpretation has to do with policy, to what extent is that empirical and natural rate relationship you were discussing earlier structural? That is, to what extent do different policy rules affect its slope and position?

MS. YELLEN. Well, I think the econometric evidence suggests that the pass-through has declined and doesn't speak clearly to the reason for the decline. My guess would be that inflation expectations have become better anchored, and market participants have more confidence in the Fed's commitment to price stability. And so there are fewer, in effect, inflation scares of the type we had in the '70s, when inflation expectations became unhinged. In that sense, of course, it is contingent on policy. I think policy has also been more consistently responsive to movements in inflation—not only in the sense of having become more creative but also in the sense of systematically raising the real federal funds rate in response to an increase in inflation, which wasn't always the case previously.

MR. LACKER. I agree with everything you've said. That's my hunch about why that pass-through correlation fell as well. But then, in principle, shouldn't an improvement in expectations about policy have the capacity to make that relationship between resource utilization and nominal inflation relatively flat?

MS. YELLEN. It certainly could.

MR. LACKER. Okay.

MS. YELLEN. That could be one of the drivers. Sure, I agree with that.

CHAIRMAN BERNANKE. President Guynn, I wonder if you would say a little more about the Katrina rebuilding—why you think that’s going to be very slow.

MR. GUYNN. Mr. Chairman, the more times we visit there—we’re going to take our full board down in May—and the more people we talk to, our sense is how dysfunctional that whole area still is. The state government still hasn’t got its act together. You may have read that the mayoral race in New Orleans has twenty-three candidates. I just can’t begin to sense how they’re going to get either state government or local government operating, especially with the new hurricane season coming up. Everything we see and hear from the field suggests that, until people come to grips with what the new flood-plain maps look like and what the building codes need to look like, there will be very little real construction going on. It’s still mostly cleanup. And although we’re getting some construction in Mississippi, where they seem to be further along, the bigger area that is yet to come is in New Orleans. It looks like a ten-year proposition rather than a two- or three-year proposition. And I can’t work any better numbers than the staff did here, but I suspect it’s going to be strung out over a really long time.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. Thank you very much, Mr. Chairman, and welcome back.

CHAIRMAN BERNANKE. Thank you.

MS. MINEHAN. I notice that you are without a Hawaiian shirt. [Laughter]

CHAIRMAN BERNANKE. Next meeting.

MS. MINEHAN. Next meeting, okay. [Laughter] We've had a wide range of contacts in New England since our last meeting, so what I'm going to do is try to summarize five or six different things that came out as a result of this range of contacts.

The first point is basically driven by the data. New England continues to grow more slowly than the nation. Actually, employment growth year over year is about a third of the pace of the nation as a whole—sort of normal, in a way. New England tends to have a slower-growing population and labor force than the rest of the nation. But the recent pace of job growth is decidedly slower than the long-run average. Nonetheless, regional businesses seem to be broadly participating in the growth of the overall economy, and even the pace of losses in manufacturing jobs seems to be slowing. Indeed, merchandise exports for the region were quite strong despite continuing manufacturing job losses, suggesting that regional manufacturers have figured out a way to enjoy some productivity growth and to keep their output relatively high.

Almost all contacts have been quite upbeat about sales and revenue expectations for this year. Most state corporate tax collections have been booming, and retail sales and state sales tax revenues are at or above budget almost everywhere except Rhode Island. Rhode Island seems to be going through a kind of flattening of growth. I'm not exactly sure why.

At a recent conference of regionwide Realtors, optimism was expressed by heads of state Realtor groups that, so far, home sales and prices, although they are certainly moderating, have held up fairly well. And that's even considering the fact that in the fourth quarter of last year, sales in the Northeast, unlike for the nation, declined for both new and existing homes. But '06 was viewed by this group as proceeding fairly well.

There is some evidence of tight labor markets for certain skilled jobs. We have in one of our advisory groups a CEO of a software firm that does software and consulting services oriented

toward recruitment for Global 2000 customers. She reported that their clients around the world are having difficulty hiring health care, technology, finance, and professional-level sales personnel. So she was seeing some real uptick in labor market tightness at the high end.

And I must say that when you look at commercial vacancy rates, which have declined for Class A downtown and suburban space, not just in Boston but elsewhere, you seem to get the impression that maybe businesses haven't started to hire yet but they do have plans to hire and they do have plans to hire at the high end.

Finally, local measures of price growth remain quite contained, though headline CPI data indicate that the region has suffered more than the nation from high energy and utility costs, even with the quite mild winter.

In assessing the reaction of contacts about cost increases, we heard a bit less complaining this time around. Maybe people have just given up complaining, or perhaps they have found ways—and I think this is probably more true than not—to offset high commodity and energy costs through rising productivity.

The picture for the nation is even better than it is for New England. We, like the Greenbook authors, have been a bit surprised and pleased at the strength of the incoming data after the bump in the fourth quarter. David mentioned all the good reasons to be pleased—strong employment, solid consumer spending, not much evidence yet of a large drag from housing, solid business investment and production, very favorable financing conditions, faster growth than the rest of the world, and through it all, moderating headline and rather flat core inflation, whether you look at the CPI or the PCE, reflecting a leveling-out of energy prices and continued strong productivity growth. True, some luck has been involved, particularly the rather temperate winter weather in the Northeast, with its good news for overall energy and electricity costs. And the drop in new home sales may be a

harbinger of worse to come. But the first quarter is over, and it was stronger than we expected, even allowing for a bounceback from Q4.

Looking ahead, we agree with the general trajectory of the Greenbook forecast, as we have for some time. However, we have penciled in a somewhat greater effect in '06 on growth from the expected falloff in housing—that is, an actual small decline in residential investment in every quarter this year and a related effect on consumption from a flattening of the growth in household wealth. So our GDP forecast for '06 is somewhere between three- and four-tenths lower than the Greenbook's, though '07 is just about the same.

We also see a smaller uptick in core inflation this year, largely because we see labor markets as having a bit more capacity than does the Greenbook, which we believe accounts for some of the moderation in wage and salary growth, at least by some measures. It may be splitting hairs to mention what in the end are small differences between Boston's forecast and the Greenbook's. After all, we don't have the same number of resources in Boston focusing on making a forecast as you do here for the Greenbook. But I think we are at a point where small differences in outlook really do affect how each of us sees the policy choices.

Now, what are the risks around this benign, if not rosy, outlook? Will they continue to revolve around growth that is higher than expected, prompted by a continuation of consumer strength—if, for example, housing takes less of a bite out of growth than we expect—and by financial conditions that could remain more stimulative as well? Indeed, when we look both at where we've been off in evaluating the outlook over the past couple of years and at our own Boston forecast, the surprises have mostly been the result of rising household wealth and a related set of very favorable financial market conditions. If these conditions continue, greater inflationary pressure than we expect could well result, given where we are in terms of resource utilization. And

of course, new energy shocks are possible, given the possible geopolitical unrest and tight supply conditions. Alternatively, looking at risks on the other side, a greater-than-expected slowdown in housing, with a related larger pickup in saving rates, could put an unexpected damper on growth. Absent new energy shocks, this would act to moderate both growth and inflationary pressures more than expected. So we see housing as integral to both upside risks and downside risks.

As I see it right now, the risks to the forecast appear relatively well balanced, maybe a touch to the side of inflation. That's mostly because we've had a lot of recent experiences with surprises on the upside relative to growth, with rising energy and commodity prices, and overall resource capacity is hard to be very precise about. However, I really don't see large upside inflation risks, mostly because of what we've seen in terms of ongoing productivity growth. It remains solid, and it continues to act as a powerful buffer. Indeed, despite the temporary drop-off in Q4, I have not seen or heard anything from my contacts that suggests the underlying business drive to be ever more productive will slow, or slow anytime soon. So although my assessment of risks has a small upside tilt and I am concerned about how expensive being very wrong on the inflation side would be, I don't see the situation as significantly unbalanced.

CHAIRMAN BERNANKE. Thank you. Let me just highlight a theme that President Guynn and President Minehan both mentioned, which is that some of the tightest labor market conditions are for the most skilled workers. It seems to me that normally in a business-cycle expansion the lower-skilled workers tend to benefit at least as much as highly skilled workers. And I just want to raise this theme for the research people and for the other principals, to see if something is unusual here or if we're just misinterpreting what is going on.

MS. MINEHAN. I don't think we're misinterpreting it. I think that's what's going on.

CHAIRMAN BERNANKE. President Fisher.



MR. FISHER. Mr. Chairman, like the others, I am grateful to be here under your chairmanship and also to be with the two new Governors who are on board. I will spare you Texas hyperbole, with the exception of just saying that our District is growing faster than the nation and is pumping on all cylinders. And I'm going to focus my comments on the CEOs and CFOs to whom I've talked, who have national and international franchises, as I am wont to do at these meetings. The situation is best summarized by one who said, "It shouldn't be this way, but it is." What he's saying and what I'm hearing from almost every CEO and CFO I spoke to, from large and small companies, with the exception of the housing companies, is that they see surprising economic strength and no pricing power despite significant cost pressures. And that strength is being projected not just into the current quarter but also into the second quarter.

So let me start with the railroads, with Burlington Northern. They reported that last week they shipped more units than in all but ten weeks of 2005. And they have internally raised their forecast for shipments of consumer goods year over year for the second and third quarters, from 6 percent to 7 percent. To quote their CEO, "It's just blowing and going."

UPS, which is not in our District but I talk to them a great deal, reports a 6 percent volume growth based on last week's numbers. It's consistent with what they expect for the first quarter, which is a number greater than 5 percent. And, again, to use a direct quote, "I just do not see people pulling back."

On the retail front, to get to some of Dave Stockton's points, the retailers at all price points are reporting that demand is strong and that "the tone of business is beating our expectations." Wal-Mart and their brethren point out that a slowdown would manifest itself in a shift of disposable income to food purchases. They are not seeing that. To quote the CEO of that very large retailer, "We thought that there would be a drag from \$2.50 gasoline, but it's not happening." They expect

4 to 6 percent comps in April. By the way, assisted by the late date of Easter, a lot is being shoved into March and then some is being carried through into April. The person I talk to there is the CEO of their U.S. operations, who is not given to overstatement. I had never before heard him say that “demand is amazing,” but that’s what he said in our interaction this week. At a higher price point, we talked to, for example, the CEO of JCPenney. He said, “We would expect to be running double-digit declines at this point, but we are seeing positive numbers with great strength in the Southeast, the South Central, the West, and also, by the way, the Northeast, which is overcoming weakness in the Central and Midwest geographic areas.”

At the last FOMC meeting, I reported concerns of a major manufacturer of drinks, juices, food products, and snacks, based on the gloominess of what he heard at the grocers’ convention in Phoenix. He now reports that they are less worried and that their concerns have lifted. And this CEO, whom I would put, Mr. Chairman—using a Winnie-the-Pooh analogy—in the Eeyore category, always sees the glass less than half full. [Laughter] Maybe because he’s in the drinks business, I’m not sure. [Laughter] He described the economy as “ticking along” and added that, as I quoted earlier, “It shouldn’t be this way, but it is.”

Kimberly-Clark, another interesting company, which is quite open with us, is a supplier in a different sector of the market. They report that “despite everything the consumer has been hit with, demand continues to chug along.”

As for the semiconductor companies, Texas Instruments has a book-to-bill ratio right now of 1.11. That is, orders are coming in 11 percent faster than they’re going out. In the semiconductor industry, a book-to-bill ratio of 1.05 is considered strong. And they are presently front-loading their capital expenditures from the third quarter into the current quarter in order to meet demand.

The other Eeyore to whom I talk suffers from a genetic challenge to being optimistic—he's a Norwegian. [Laughter] He also happens to be one of the larger ship operators in the world, about whom I have reported at previous meetings in terms of the imbalance of supply that's coming on stream and the demand for that supply. He reports that "there is much more demand growth than expected." And you see that growth reflected in the large bulk carriers, the Panamax carriers, which are the most liquid part of the market, where prices, as I reported last time, had gotten down to \$14,000 for a daily rate and are now back up to \$17,000. The container fleet is also holding up, with some change of utilization from the transatlantic shipment to the transpacific shipment. But as he says, "These markets have legs." And he characterized the overall sense of the economy with a very Zorba-the-Greek type of summary of events: "Demand side is stronger; tanker market is holding up; container market growth is strong. In short, no catastrophe."

On housing, for which you find the most negative outlook, I have just a couple of comments. I spoke to two of the five largest housing CEOs. What they and their competitors watch for is the home cancellation rate—that is, when a buyer puts down a minimal amount as downpayment, which is now down to \$1,000, on a home and then walks away. The average home cancellation rate has run about 22 percent in modern history. Right after September 11, 2001, it spiked to 28 percent. It is presently running at 32 percent for the national builders. So, clearly, housing is a not very happy area.

Everybody I talked to reports continued emphasis on cost containment and on re-engineering their production functions. One of the large chemical companies reported that they used \$11 gas to fix all their boilers and production facilities: "Everyone in the chemical industry is wringing everything they can out of overhead and operations."

So I decided to follow that subject further down the supply chain and talked to the CEO of Anadarko, one of the largest natural gas operations, who happens to be on our board. They, too, are trying to control costs by centralizing their purchase operation. They purchase about \$3 billion a year, and they expect to drive down costs at the same time in order to finance a massive capital expenditure expansion, which you would expect to be driven by the high prices that they experienced recently. Wal-Mart has put in a massive one-time enhancement of inventory management, which is pinching suppliers but is providing them with significant savings in dollars.

All the companies reported continued interest in building their offshore interests—again, to drive down the cost of operation. And I thought it was interesting that as Mike Duke, the CEO of Wal-Mart International, was leaving India the other day, Michael Dell—a good Texas company, Dell—got off the plane at the same time and announced that they are going to create jobs for 20,000 new employees in India. One of the largest securities houses reported that they had sent one of their most senior officials four times in the past nine months to India to figure out a way to drive down the analytical costs by having corporate spreadsheets and other things done there before they're presented to the decisionmakers for their buy-side analysis and their sales-side analysis. The CEO of Kimberly-Clark gave me a remarkable number. He had just come back from India. They are looking to fill 9,000 jobs. They received 1.4 million resumé in English. A Dallas director who is a venture capitalist reported that they will no longer consider providing capital in a second-round venture capital financing unless the company has a foreign component for offsetting costs. Finally, one of our directors in El Paso, a woman who manufactures accessories in Mexico, has decided to move her Mexican operations to inland China to save on costs. My point is that this appears to be now part of our corporate DNA in terms of trying to drive down or contain costs. Again, as the

CEO of Wal-Mart said, “This is not just an issue of low labor costs. It’s an issue of effecting enhanced profitability.”

I want to end with a comment of concern in terms of my own District, with regard to construction. If you look out the window of our offices in Dallas, you’ll see twelve gigantic building cranes. It almost looks like Shanghai, and this is old downtown Dallas. And I’m reminded of the comment that was made by one of my predecessors, Bob Boykin, at this table when he was bragging about the fact that Caroline Hunt, in building a project and a hotel—where you’re going to stay when you visit our District—had managed to dig the largest hole ever dug in history. And your predecessor, Mr. Volcker, said, “Are you speaking figuratively or literally?” [Laughter] I don’t know where this will lead, Mr. Chairman. I do sense that, on the anecdotal side, final demand is much stronger than the econometrics would tell us. My gut tells me it will end in tears, but we’ll talk about that tomorrow.

CHAIRMAN BERNANKE. Speaking of the largest hole ever dug in history, I wonder if you would have a view on the current account implications of some of this offshoring that you’ve been talking about. Are you concerned about that?

MR. FISHER. I am concerned. I worry particularly because I think—and I’d have to get the numbers, but I’m virtually certain—that the shift is taking place particularly in currencies that don’t adjust to the dollar. India has just announced that they would open the rupee and open their capital account. The Chinese clearly do not have a free-trading currency.

And at the same time, just to show my bias—Janet is going to be very disappointed in me, I think—I subscribe to Winston Churchill’s approach to trade, which is if someone else—I won’t use his exact vernacular—wants to take advantage of their taxpayers and subsidize their production and provide it cheaply for us, we should take it, add value, and capture the majority of the profits. So I

think we are doing that. I think there are limits as to how far we can run on the current account deficit. I also expect that eventually the market will correct for that. But we've been talking about that for a great deal of time. Last year, we worried about the dollar's strengthening rather than weakening. And I subscribe in part to what President Poole argues: The question is how long you continue to attract capital.

Just one more comment on that front, and this is why I asked the question about the Polish zloty and the New Zealand dollar. One of the things I am concerned about, Mr. Chairman, is that my investment instincts tell me, as we raise rates here and as the yield curve perhaps shifts upward—and perhaps someday at the longer end of the yield curve—that there will indeed be a greater desire to invest in high-quality, risk-free credit like that of the United States and to withdraw capital from some of these lesser, marginal credits. So there might actually be a short-term effect by which we are encouraged and emboldened by greater capital influence rather than lesser capital influence. My overall instinct is that we're postponing the pain and the correction and it's further out there.

CHAIRMAN BERNANKE. Thank you. We have a timing decision to make. We could take a break now and come back. I'd like to propose that we stay in the meeting until 6:00 and, at that point, go to a reception and dinner. We will probably not finish this round by 6:00, but there will be plenty of time tomorrow to do that and time to reflect. Is that acceptable to everyone, to just stay in the meeting? All right. Well, let's continue then. The next person is President Stern.

MR. STERN. Thank you, Mr. Chairman. I see little in the latest information on the District economy or data on the national economy that gives me undue concern about prospects for sustained economic growth. Turning first to the District—as is frequently the case, overall it is performing much like the national economy. The expansion is broadly based, employment is

growing, while the usual labor market churning continues. Sectors such as manufacturing, mining, and energy are particularly strong at this point. Some job skills, particularly in health care, accounting and auditing, technology, and the energy sector, are in short supply. Consumer spending overall is well maintained, and nonresidential construction activity appears to be improving. Housing activity is a little more difficult to summarize. Construction remains strong; sales are still relatively substantial, as best I can determine; and inventories of unsold properties are rising as well.

Turning to the national economy, I said earlier I wasn't particularly concerned about the outlook, but I really should put it more positively. It seems to me that the current state of the national economy and its prospects are both quite good at this point, consistent with growth this year of 3½ percent or perhaps even more. I'm impressed by the employment gains that we've seen, sustained income gains, and so on, and remind myself and others that, as the 1980s and 1990s demonstrated, the economy is certainly capable of long periods of uninterrupted expansion.

I thought I would comment a bit more on two issues in particular—one is housing—where I wonder if the significance of potential developments might not be being exaggerated a bit. I certainly agree that changes in housing prices, up or down, feed into household wealth and through that into consumer spending. I think that's a perfectly acceptable story. So if housing prices go down or level off, they will have that effect on wealth and potentially on spending. But there seems to be a view that, in some sense, an exogenous pronounced decline in housing prices is possible, maybe even likely, and that this could be more devastating for the economy. It's not that I would quibble with that story, but I would wonder about its likelihood because it seems to me more likely that housing is the tail rather than the dog in this. That is, as long as employment continues to go up, incomes continue to go up, and mortgage rates remain relatively moderate, then I would expect that we would avoid severe difficulties in housing except for a few markets that are particularly

inflated at this point. Putting it the other way around, only if overall economic conditions deteriorate, with employment declining and income growth slowing or declining and so forth, would I expect there to be more broadly based and more-severe problems in housing.

The second issue I'd like to spend a little time on is the inflation outlook. The question I asked myself is, How likely is an appreciable acceleration of inflation at this point, particularly in light of the steps we have taken to get the federal funds rate back to a reasonable range? First, I would argue that inflation expectations remain very well anchored at this point. I don't hear, as I go around and talk to various groups and meet with various business people, any doubt among the participants about the Fed's ongoing commitment to low inflation. And I think most of the available data support that. One of the things I was looking at was a chart of one-, five-, and ten-year rates of core PCE inflation. And when you look at that, you see that the ten-year rate of inflation has been declining steadily and now is a little below 2 percent. The five-year rate has basically the same pattern. It leveled off in about 2000, but it, too, is a little below 2 percent. And, of course, the one-year rate of inflation, although it bounces around a lot more, ends up at about the same place, also a little below 2 percent. And I just don't have a sense that there has been any unhinging of inflationary expectations at this point.

Another topic that I would comment on only briefly is the issue of lags in policy. That is, presumably the full effects of the actions we've already taken have not yet been felt.

Finally, we have looked at some forecasting equations that try to incorporate the growth in the money supply in particular and to forecast core PCE inflation. I wouldn't claim a lot for the quality of these equations. I wish I could, but I can't. But for the most part, these various equations provide forecasts that are very close to the Greenbook forecast. Inflation might be a little lower this year or might be a little higher this year, but they show very small changes for the most part. My



view is that the Greenbook inflation forecast is a pretty good one. Like President Yellen, I originally submitted a number of 1.8 percent for inflation this year, and I don't see any reason to change it at this point. Thank you.

CHAIRMAN BERNANKE. Thank you. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. The momentum in the Fourth District economy appears to be broadly similar to the rest of the country's. The region appears to be expanding at a good but not spectacular pace. Although my District never experienced the extreme acceleration in housing activity seen in many other parts of the country, we are nonetheless seeing some downturn in residential activity relative to last year. And, of course, we are being affected by the shifting fortunes in the auto industry. The further we move into the year, the more optimistic business people seem to be about the outlook. The softness in last year's fourth quarter is now all but forgotten. Business leaders in the District are sticking with strong capital spending plans, and I've been getting especially positive reports on commercial construction.

Turning to the national economy, the Greenbook baseline captures the broad contours of my own expectations—namely, a slowing in personal consumption spending and, as many others have commented, in the housing sector over the course of the year, leading the overall economy back toward a moderating but solid growth path next year.

As for the outlook on prices, I am still predicting that headline inflation will shift down this year from last year's energy-shocked pace and move much closer to the center of my preference range. Overall, I really am not seeing a lot in the way of warning signs that inflationary pressures are building. I get sporadic reports of labor market tightness, a point to which I'll return in a minute. But I hear just as many reports highlighting the moderation of energy costs, especially for natural gas. The headline and ex-food and energy CPI inflation for February were quite favorable and were

certainly interpreted as such by financial markets. And, importantly, inflation expectations do appear to be well contained. Like others, in Cleveland we typically monitor the ten-year TIPS spreads, and those certainly have not been giving me any cause for alarm. Despite this, I get a sense from business contacts that the full pass-through of energy and material costs into final goods prices may not yet be complete. Consequently, the arc of my outlook is quite similar to that of the Greenbook—some slight tick-up in core inflation this year as a whole, with core measures moving down to more-desirable levels in 2007.

As I turn to the risks to the outlook, I try to think of those places where my staff's analysis or the comments that I hear from my business contacts seem most at odds with the Greenbook projections. If there is one area of some disagreement, it would be the degree to which the Greenbook seems to emphasize potential increases in labor costs as a source of upward price pressures in the near term. Consistent with the Greenbook assessment, I am hearing, for the first time in years, reports of some tightening in labor markets and some accelerating wage growth. However, to echo your theme, Mr. Chairman, the job vacancies and wage pressures do appear to be concentrated in a small number of high-skilled occupations. My list is very similar to President Minehan's. In truth, I have to work pretty hard to get my business contacts to talk about their concerns about accelerating wage costs. And I fear just a little that my interrogations may be forcing confessions from the innocent. [Laughter] At the same time, my business contacts are still optimistic about their ability to generate solid productivity gains. Although I do expect to see some continued pass-through of previous shocks to core measures of inflation, these influences are expected to dissipate over the course of the year.

When I add up all of these pieces, I don't see much evidence that capacity constraints are likely to drive up price and wage pressures. What I don't know, of course, is whether the reports

that I'm getting are peculiar to the Fourth District. When I look at the employment cost data over the past several quarters, they seem consistent with a relatively benign wage cost picture. But I heard from a few of my colleagues ahead of me that they are seeing a different picture. I am interested in whether these anecdotal impressions that I'm getting are just a Fourth District peculiarity or whether they're spread more broadly. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. You mentioned nonresidential construction, and President Fisher mentioned that. I think the Greenbook was pretty pessimistic about the near-term prospects for nonresidential construction. Is there some dissonance there? [Laughter]

MR. STOCKTON. Well, in fact, we're forecasting a recovery. We've been forecasting a recovery for the last year and a half that hasn't happened yet. I actually don't view us as being terribly pessimistic in that regard. We're forecasting an upturn after a long period of disappointing, sluggish performance on that side. So I guess I'd characterize our forecast as somewhat optimistic relative to where we've been over the past two years.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Do you count state and local construction in that? Does that come in nonresidential or in state and local spending?

MR. STOCKTON. That's actually in state and local construction spending. It's a different component.

MS. MINEHAN. Because that, I would think, has the potential to be pretty strong, given the tax collections and so forth.

MR. STOCKTON. Actually, it has been an area that has improved as well. So the one part in which we haven't seen much yet has been the office building side. And that is an area where our forecasting improved, so I was actually a bit relieved to hear of some cranes out there. [Laughter]

CHAIRMAN BERNANKE. President Pianalto.

MS. PIANALTO. I was just going to add to that, David. For so many months I was hearing about some increased construction in health care facilities and school buildings. But in the past few months it has been broader than that—it has been office buildings and some plants.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Mr. Chairman, in terms of what we see outside our window at our Federal Reserve Bank, it is almost all condominium construction. The joke is that you want to be the fourth owner of the building that is being constructed.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. A couple of things, first, on the region. Like the nation, our region continues to grow at a fairly robust pace. But one of the questions we kept asking in our discussions was whether it was strong but leveling out, or accelerating. I think, for the most part, the consensus is that it's strong but leveling out. Turning to just a couple of examples, manufacturing activity did expand in February and, we think, in March on a preliminary basis, but at a somewhat slower pace than in January and even in December for us. Production and new orders rose only modestly in the February and early March period. Housing activity, as others have discussed, has shown some signs of leveling off, although it is still high by historical standards. Residential construction has edged down in most areas of our District, and builders to whom we've talked expect further easing in the months ahead. I think it is important, too, that home sales are showing little or no growth, with high-end sales softer than most of the other segments in our markets.

Just to mention commercial real estate, it has actually improved somewhat in our region. Vacancy rates have continued to edge down in the Denver and Kansas City areas, so we have seen

some pickup in activity. Energy activity continues to expand very rapidly, despite shortages of labor and equipment throughout the western part of our region. In some of our Rocky Mountain communities, concern has increased that the energy boom will drive away some of the other core business because of the costs of labor, land, and houses—it is really a boom environment there.

I will talk quickly about inflation in our area. Wage pressures, in fact, remain mostly subdued. We have seen some backdown in wholesale prices, although retail prices have edged up. Manufacturers reported to us somewhat slower growth in raw material prices so far this year compared with last year. However, I would say they are also concerned that they cannot pass price increases on as they work through the process.

Let me just say one thing on the auto industry in our region. I talked with one of the largest retailers-dealers in the region, in Denver—actually, he goes into Texas and some other areas. He told me that in just the first two weeks of March they've seen a general slowdown in some demand for their products, both domestic and foreign. But he said that, obviously, the domestic market is really suffering greatly. In fact, he has seen other dealers refuse to take inventory from the domestic auto dealers, which gives him real concern about that industry going forward.

Turning quickly to the national outlook, I agree that, for the most part, it is very positive. I think that in the first quarter, maybe the first half, we will see a strong GDP number, perhaps as high as the Greenbook has indicated or even higher, which will then move back down toward the trend rate of growth over the course of the year. Like President Stern, I think part of this in the first quarter and first half is reflective of a couple of things. One is the bounceback from the year-end. Another is the last effects of accommodative policy that we had in the previous year, because a lot of money is still searching to be deployed right now but is beginning to be used up. And for the first time in a while, I've heard more and more businesses talk about the prime rate. I haven't heard that

in four years. They are much more sensitive to it. They've seen it go up, and now they're negotiating around that, which I think tells you that some of the catch-up in terms of the policy effects of our past moves has begun, and I think you'll see more of it in the coming months and quarters.

CHAIRMAN BERNANKE. Thank you. A number of people have talked about tightening monetary conditions. President Yellen did. Of course, long-term rates have not risen, so I guess there is a question here about the issue of how much is the term premium, how much is the change in the equilibrium rate. I just put that question on the table because your views on it should affect whether you think conditions are essentially easy or tightening. First Vice President Stone.

MR. STONE. Thank you, Mr. Chairman, and welcome back. And welcome to the new Governors. First, I'd like to make a couple of comments on the region before I talk about the national economy. The Third District didn't see a fourth quarter as weak as the national economy, nor is our first quarter as strong. But we're seeing solid growth, which our indicators tell us will continue at current rates for the foreseeable future.

Payroll employment is a particular issue in our District. With the benchmark revisions that were made, our employment growth has been stronger than we originally estimated. Our three-state unemployment rate fell to 4.4 percent in January, and businesses report an increasingly difficult time finding qualified workers. Indeed, more than half the respondents to a special question on our manufacturing survey said that they were having trouble filling openings because of the lack of qualified applicants. That's an increase from 40 percent when we asked that question two years ago. Firms report the greatest difficulty in finding production workers and computer-savvy employees, but I would go on to point out that one of our directors, who heads a temporary

employment agency, has been reporting for the past two years a continuing difficulty in finding workers with even limited skills to deploy.

Manufacturing in our area continues to expand at a moderate pace. After a temporary dip in January, the index in our survey has rebounded to the level consistent with last summer, and that level is consistent with moderate expansion in activity.

Retail sales in our District are rising only modestly, but retailers tell us that weaknesses in February were weather-related and that they expect a pickup in April. Demand for nonresidential office space in the District is growing, and that's unusual for our market. The office market absorption rate is rising in the Philadelphia metropolitan area, and the office vacancy rate is declining in both the city and the suburbs. We had some office building in the last couple of years, which is the first office building we've had in downtown Philadelphia in a decade. We are seeing a few signs of modest slowdown in housing markets, with permits, home sales, and mortgage lending softening in recent months.

Finally, we have received some further welcome news of moderation in price pressures in the District. Our manufacturers' survey measures of prices received and prices paid have fallen sharply over the past two months. Expectations of future price increases remain subdued, and several respondents told us that, in their view, input price pressures have settled down and that their inflation concerns have subsided.

Turning to the national economy, our economic outlook is broadly consistent with the Greenbook baseline. All signs point to a strong rebound of growth this quarter, after the temporary weakness in the fourth quarter. Employment, business spending, and manufacturing remain strong, and consumer spending continues to increase at a solid pace. There are emerging signs that the housing market is beginning to cool off, but no signs of a sharp retrenchment at this point. The

economic fundamentals remain solid, and after the rebound this quarter, we expect growth to settle down to a range of 3 percent to 3½ percent, near potential growth. The economy is expected to remain near full employment, with labor markets tight. We expect hourly compensation growth to accelerate somewhat over the forecast period, but not dramatically.

Now, in my view, the risks to growth are roughly balanced. A sharper decline in the housing market than that built into our forecast poses some downside risk, but it's also possible that housing will not turn down as much as or as soon as forecasted. The extent to which we see an improvement or further deterioration in exports is another risk that could go either way. In fact, there appears to be a considerable divergence of views on the path of net exports among private-sector forecasters.

In my view, the inflation risks are tilted somewhat to the upside. It's true that the data on core inflation and inflation expectations and our own recent decline in survey measures of prices paid and received are encouraging. The acceleration of core inflation at the end of 2005 has been reversed in the first months of 2006. So far, firms have had a remarkable ability to absorb cost shocks via new-found productivity gains, and increased global competition has limited their pricing power. Both have helped keep inflation in check. On the other hand, oil prices remain at high levels and continue to be volatile. The ability of firms to maintain low pass-through in the presence of continued higher costs is a question. With inflation running near the top of the range that I consider consistent with price stability and with the economy operating at high levels of resource utilization, there is a risk that strong inflation pressures could emerge. Several times in the past we have seen core inflation quickly rise by a sizable amount when the economy was operating at high levels of resource utilization following periods of accommodative monetary policy, even when oil prices did not rise sharply. So in my view, the inflation risks remain at least moderately on the



upside, even though the recent data have been benign. That said, on the whole I think the economy and the economic outlook are very positive. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. While we had some softer readings on our District's economic performance early in the year, recent measures have been noticeably stronger. Our survey results from March have come in since the Beige Book, and they show continued strength in service-sector revenue growth, along with a sharp rebound in shipments, new orders, and employment for the manufacturing sector. The retail sector, in contrast, has been weaker in February and March. Some of the weakness is in furniture and may reflect cooling housing markets. However, other retailers suggest that they are still experiencing givebacks following the extraordinary sales growth they saw in January, and many remain optimistic about sales prospects going forward.

Several District businesses we talked to plan to increase investment in the months ahead. Their plans include not only computers and technology but also factory machinery. Labor markets in our District seem to be getting tighter. In January, Districtwide unemployment stood at 4.1 percent, and we hear scattered reports of shortages of skilled workers, as you mentioned earlier, along with some complaints that worker shortages are constraining production. I had heard occasional references to worker shortages in past months, going back into last year, but this chatter has picked up noticeably in recent weeks. Not only have the number of reports increased somewhat, but some now come from outside the traditionally strong urban areas. We're hearing it now in the manufacturing-dependent Carolinas, for example.

Price growth measures moderated in our March survey results. District businesses report that input price increases slowed, but they continued to express concerns about future cost pressures.

Our respondents also reported slower growth in their output prices, and this was broadly based across all sectors we survey. In addition, expected price increases for the next six months generally lessened.

Our regional economic indicators on production, employment, and price pressures seem broadly consistent with the national picture. The data point to a strong rebound in GDP growth this quarter, perhaps stronger than had been anticipated by the Greenbook and private forecasters. While household residential investment is slowing, business investment and spending appear to be strong, suggesting that firms are adding to capacity in anticipation of healthy demand growth. The prospects for income growth, driven by continued employment gains and respectable growth in compensation, give me some confidence that overall consumer spending should hold up well, even as housing market activity moderates.

Inflation has come in a bit lower than expected, and I'm increasingly comfortable with the idea that we've gotten beyond the risks to inflation presented by the shock associated with last year's hurricanes and run-up in energy prices. Core PCE inflation averaged 2.3 percent from August through November but has averaged 1.8 percent from November through January. Although market-based measures of longer-run inflation expectations rose briefly last fall, they soon subsided and have remained steady since. So while I'm not entirely sanguine about the inflation outlook, I think the immediate risk of pass-through has probably passed us by.

Looking back over this episode, and how we and many others feared that things might have unfolded, I think it illustrates the challenges we face in trying to understand inflation dynamics. As energy prices rose sharply last fall after the hurricanes, the fear was that a sustained increase in core inflation and inflation expectations would work its way through the economy in the first half of 2006. This bulge now appears to have been small and short-lived.

A common approach to forecasting the effect of energy-price shocks on core inflation is to rely on relationships estimated over historical periods that include seemingly similar episodes. Such an exercise implicitly treats the empirical relationship between energy prices and core inflation as structural, as in models in which wages or prices are set in a backward-looking fashion. But as President Yellen and others have emphasized, this relationship is not stable in the historical data. It has largely disappeared since the late 1980s. This underscores the pitfalls of forecasting inflation based on a backward-looking approach that relies on pass-through correlations or, for that matter, Phillips curve correlations between measures of slack and inflation. In contrast, to the extent that price-setting is forward looking, these correlations must embed expectations regarding our policy behavior and so will not generally be stable across changing policy regimes.

This perspective suggests that the limited magnitude of the pass-through from last fall's energy-price shocks was influenced by the public's confidence that we would focus on preventing broader inflationary spillovers. In other words, we may have gotten less pass-through than we feared because we were more credible than we realized, and the public's behavior was more forward looking than we thought.

Again, this is not to say that I'm complacent about inflation. The initial response to last fall's shocks embodied expectations of a lower path for the funds rate and a greater rise in inflation. Fortunately, the combination of communication by FOMC participants and the Committee's steady actions appears to have brought these expectations back in line.

I bring all of this up because in the months ahead we are likely to see tighter resource utilization if the Greenbook is correct, and we will be concerned about the extent to which that would put upward pressure on inflation and inflation expectations. So the question of the extent to

which inflation dynamics are backward looking or forward looking is going to be front and center for us.

CHAIRMAN BERNANKE. And yet our behavior has to be consistent with the model, right? We have to respond in a way that does, in fact, react to inflationary pressures.

MR. LACKER. That's right. It's just that I'm always struck in episodes like this at the difficulty of taking advantage of historical correlations without taking a strong stand on how the public expects us to conduct policy.

CHAIRMAN BERNANKE. I'll agree. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. Like all of you, we think the underlying trajectory of demand and inflation seems quite favorable, perhaps a bit more so than it did in January. We expect real GDP to grow at a rate slightly above the rate of increasing potential in '06 and to slow to the range of potential in '07. We expect the core PCE to rise at a rate in the neighborhood of 2 percent over the forecast period. Differences between our forecast and the Greenbook's are minor. In our forecast, we assume that inflation expectations remain anchored and the term premium remains low and that we are now at a point where little or no resource slack is left in the domestic economy.

The monetary policy assumption we adopt is the path currently priced into the futures markets. The major sources of uncertainty in our forecast are the size of the wealth effect we might see accompanying any slowdown of housing, the flexibility of profit margins, and the sustainability of this present configuration of low risk premiums. We view the risk to the growth forecast as roughly balanced, although the usual suspects provide a source of concern. The risk to our inflation forecast, in contrast, still seems slightly tilted to the upside.

On the growth front, as I said, we think the underlying pace of demand growth is pretty strong, and we don't see any signs yet that would point to evidence of a significant slowdown relative to potential in prospect. We think productivity growth is likely to remain quite high, rising perhaps a bit faster this year than in '05. With the labor market growing on trend and some increase in labor's share of national income, we expect consumption growth to remain reasonably strong. Stronger income growth offsets the expected deceleration in housing-price appreciation and the effect that might have on consumption. We expect a slight increase in the contribution of business fixed investment to demand growth, due principally to a rise in spending on equipment and software. We expect, of course, the contribution of residential investment to slow with the forecast period. World GDP growth seems stronger and more broadly based. We expect net exports to be a persistent drag, shaving about  $\frac{1}{2}$  percentage point off growth for each of the next two years.

Despite this forecast of pretty strong spending growth and high levels of resource utilization, we believe core inflation is likely to remain moderate. Under the assumption of a relatively stable dollar and with the energy-price assumption taken from the futures curve, we expect headline inflation to slow to a rate closer to the core over the forecast period. But this forecast rests on three important foundations. The first is that we succeed in keeping inflation expectations reasonably well anchored. The second is that demand growth not only does not accelerate to a rate substantially above trend but also slows to potential over the forecast period. And the third is that the expected rise in compensation and unit labor costs results in a rise in labor share of income—in other words, that compensation growth accelerates but the increase is absorbed by some compression of profit margins and does not lead to a significant acceleration in core inflation.

Now, the sources of potential upside risk to the inflation forecast are several. One, of course, comes from the interaction between our views about productivity growth, compensation,

and profit margins. If the pace of productivity growth slows significantly relative to our assumption and if, at the same time, conditions in labor markets continue to improve, unit labor costs are then likely to accelerate. A rise in compensation, however, would not by itself portend a troubling increase in core inflation. The extent of this risk, as I said, depends on the degree to which rising unit labor costs are absorbed in shrinking profit margins rather than triggering output price increases as firms attempt to defend existing margins. And because the labor share of income seems somewhat low and, as historical averages suggest, there's room for unit labor cost growth to be absorbed in profit margins rather than causing price increases, we need to be attentive to the risk that this process may produce a short-term increase in core inflation, perhaps also in inflation expectations.

A second potential risk comes from what we think we know about the pace of demand relative to potential supply globally. A continued increase in commodity prices around the globe and, more recently, some modest increase in capital goods prices may suggest that global pressures on resource constraints are pushing up prices. This raises the risk that the recent weakness in core goods prices in the United States may not be sustained. Service price inflation in the United States has shown signs of slowing.

Our central forecast, as I said, is conditioned on little movement in the dollar over the forecast period, but any sizable depreciation of the dollar would still carry the risk of some acceleration in core goods prices.

For nearly two years, overall inflation, as what is measured by the PCE or the CPI would suggest, has been running substantially above core, and this is true for a range of alternative measures of underlying inflation. If the underlying inflation rate were closer to 1.5 percent than to 2 percent, we might view these potential sources of upward pressure with more equanimity.

Although the probability seems low that these forces will act to produce a significant acceleration of core inflation or a significant deterioration in inflation expectations, we need to be careful about those risks. So with underlying inflation at the upper end of the inferred inflation preference of the Committee, we need to be more attentive to these risks.

On the growth side, the most obvious sources of downside risk to growth are a substantial rise in energy prices from current levels, a slowdown in productivity growth, a sharp rise in risk premiums, and a more-adverse effect on saving and consumption from the expected adjustment in housing markets and prices. Like the staff forecast, we think it's reasonable to expect household saving to rise a bit and consumption growth to slow, in part because of changing expectations about the pace of future appreciation in the value of home equity. But we believe that, absent some large, negative shock to perceptions about employment and earned income, the effects of the expected cooling in housing prices are going to be modest. Of course, this view may prove optimistic. We take some reassurance from the fact that the average growth forecast in the private sector probably anticipates a significant cooling in housing and a significant effect of that cooling on saving and consumption.

Developments in asset prices and risk premiums over the past several months seem to support this picture of stronger confidence in the growth and inflation outlook because real rates seem to have risen. Equity prices and credit spreads suggest considerable confidence in the prospect for growth. Implied volatilities remain quite low. We don't know how much of this is fundamental and how much will prove ephemeral. At the moment, though, overall financial conditions seem pretty supportive of the expansion.

So with this forecast of growth in the vicinity of potential, core inflation at around 2 percent, and the risk somewhat to the upside for inflation, we think the principal responsibility of monetary

policy remains to preserve the sense that we will act to keep long-term inflation expectations contained at levels consistent with price stability.

CHAIRMAN BERNANKE. Anything to report on co-op prices in Manhattan? [Laughter]

VICE CHAIRMAN GEITHNER. As in many cases, I am not sure what you can take from the anecdote, but I guess some people say that you see a little of the froth dissipating. But I don't think the adjustment is acute. If you see hiring at the New York Fed go up substantially in the market, that will be a good leading indicator of housing prices reverting somewhat. [Laughter]

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. Overall, I agree with many of you around the table and with the Greenbook. I see that you have solid growth going forward. I want first to talk about the corporate sector and then to talk a bit about the household sector.

I have talked with several corporate CFOs in the past couple of weeks, and I also just received a copy of the Duke quarterly CFO survey. I found the comments from the CFOs and the survey results to be similar, and so I thought I would just use the Duke survey to make my comments here. The CFOs are expecting to be able to raise prices more over this coming year than they did last year. On average, they are expecting an increase in prices of about 3.3 percent. A year ago at this time, the quarterly survey showed a 2 percent increase. So the increase is slight. And they are also expecting to raise wages and salaries faster, 4.2 percent this coming year. Their biggest concerns continue to be global competition and health care costs—that has not changed at all.

What I find really amazing is how much these CFOs continue to be focused on cash levels. Right now, as you know, the liquid assets on the balance sheets of corporations are at the highest level in at least forty-five years. Corporate profit margins relative to GDP are running at 11 percent,



and that is again a record level. If you look at the survey results, the CFOs are saying that they plan to increase cash even more in 2006. How are they going to do that?

One of the things this group is forecasting this year is for earnings to grow 13.1 percent. Last March the survey said 11.4. So the projection for earnings growth is up about 2 points. They are not expecting top line revenue growth of 13 percent—they are expecting to be able to widen their operating margins. So the trends we have been seeing are what everybody is just building on. This inertia and this new focus on cost management seem to be central to what is going on in corporate America. Partly, too, they are worried about top-line revenue growth, and I am hearing more of them talking about using mergers to widen their operating margins: Grow market share through acquisition, get immediate revenue pops, pull out the extra costs, and get the bottom line growth at 13 percent that way. They also are planning to spend more on capital expenditures this year, up 6.5 percent versus 4.7 percent, and also much more employment growth, 2 percent versus 0.6. So they are optimistic; but again, the focus on widening operating margins from already historically wide levels and on building liquid assets shows that a real focus on the fundamentals in corporate America is continuing.

If you look at the survey of small businesses, you can read the same kinds of trends in the responses. The optimism of small business remains at a very high level. So, in summary, I think corporate America is going to continue to push earnings growth and production but is clearly focused on cost containment. And while they may be looking at raising prices a bit, I think overall prices will be contained.

Now, a look at the household sector. What I have been noticing in the past few months is that job growth, as many of you have mentioned, has clearly gotten a lot stronger and also that wages are growing much faster—in the last three months, they have gone up at an annual rate of 4.8

percent, which is pretty strong. I think we have to go back about four or five years to get that kind of increase.

So the real question, as many of you have said, is what is really happening to productivity. The last time we had this kind of wage growth was in the late '90s, and we saw the pop in productivity. So unit labor costs were there and helped modify inflation. I heard from the CFOs that this is exactly what they are trying to do—to find ways to improve productivity just so they can handle the higher wage cost because they are finding that skills are short in some areas. But the highly skilled people are probably also more productive, on average, than other folks who may be looking for jobs, and hiring the more-productive workers could also help in that way.

I think that the good job growth and the faster wage increases will also help put a floor on housing sales. You know I have been concerned about where we are in terms of the mortgage markets going forward in support of housing. We know that the fixed obligation ratio that our staff constructs has been at record levels; last quarter it showed a tick down in the fourth quarter, but it still is relatively high. Mortgage rates on the long end have not really moved very much in the last couple of years. But to the extent that so many new mortgages were financed with adjustable-rate mortgages in the last year and the ARM rate spread now has really moved up as we have moved short rates up, there is less than a point difference now between one-year ARMs and the term rates. So affordability, I think, is going to continue to come under more pressure going forward.

Housing inventories are increasing. Again, I talked to a CFO at a large builder. They clearly are managing inventory much better than they did years ago, but even so, backouts on sales and such things are increasing. The number of housing starts that they have in train and starts going forward are going to be slowing down, and they are giving guidance to the Street that they're not

going to get the sales that they had. But even if it slows down, housing is still going to be very strong in relation to historical standards, but it will be off the peak that we have been seeing.

Finally, to follow up on the comments that some of you made, I see that we still have a tremendous amount of liquidity in the financial markets. Again, corporations are sitting on all this liquidity. We do not hear anything from corporations about difficulty in financing big or small business. We know the bankers clearly are looking for loan growth and trying to find it, and the housing market is able to attract all the liquidity it needs. So in terms of how effective our rate increases have been, I see that the lag effect is still there and that plenty of liquidity is still out there, which keeps me focused on where core inflation will be.

CHAIRMAN BERNANKE. Do you relate the corporate preference for cash to caution, to risk aversion, and what implications would that have for capital investment?

MS. BIES. I would say that, until about six months ago, most of it was risk aversion. Corporations were not sure what their plans were going to be. They did not know how they were going to get earnings growth, and so I think some was a precautionary kind of savings. They clearly deploy most of it into restructuring their balance sheets, refinancing, and getting corporate leverage down. A number of them use some of the cash, playing the accounting game of putting it into pension funds and booking a higher yield on the pension than they could in short-term investments in equipment and software. But I am beginning to hear that they are more likely to loosen the strings and have more cash going forward.

Another interesting thing I heard from one CFO, although somebody just mentioned the danger of anecdotes, is that they are putting more of what they call "investments" in human resource training and development than in equipment because they see that, if they cannot hire the people

with skills, they have to develop the skills of the good employees they have. We do not capture that, but it may be one of the ways they are using the cash flow.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Since the last meeting, as many of us have remarked, we have seen stronger domestic demand and a little less core inflation than expected. To a degree, this extends a pattern. In looking at the Greenbook chart on the evolution of the staff forecast, I was struck by the steady upward drift since last fall of projected growth in 2006 and 2007, coupled with flat to downward movement in projected inflation for those years. Now, much of the 2006 growth was shifted from 2005, but the unemployment rate at the end of this year and next is lower than it was projected last fall—without any more, and maybe even a little less, price pressure projected.

One possibility is that we are seeing a smaller effect from higher energy prices than anticipated, at least on inflation and perhaps on demand as well. Since we expected the effect of energy prices on growth rates of output and core prices to be temporary in any case, this sort of information should not deflect us from our underlying view that growth is in the process of slowing to trend, holding underlying inflation roughly stable.

The cooling of the housing market is the main impetus for a slight moderation in growth. In this regard, although the incoming data on housing have been distorted by unusual weather and subject to considerable noise, I judge them on balance to lend added support to the sense that activity and price increases are softening, albeit to an unknown extent. I agree with President Stern that an orderly cooling of these markets with moderate effects on growth is the most likely outcome, but we just do not know yet. Rising inventories, declining new home sales, downward movement in building permits, and a drop in mortgage applications—all point to an appreciable drop-off in the

demand for housing. In the staff forecast, residential construction flattens out this year and next, after contributing nearly half a point to GDP growth last year. Logically, softer demand should also be reflected in prices. Unfortunately, data for prices are even harder to read than those for activity, but the recent monthly information on existing and new home prices seems consistent with the March slowdown in the rate of increase of these prices, which should feed through to wealth and consumption. And we probably haven't seen the full effect of the rise in short-term interest rates on housing demand, particularly for those who are liquidity or income constrained. Mortgage rates have also picked up somewhat this year, and they are at the upper end of the range they have been in for the past several years. So we could see some of the long-term mortgage rate effects as well.

It is possible, of course, that the damping influence of the housing market could be offset by greater strength elsewhere, and two logical contenders are exports sparked by stronger growth abroad and business investment. We have seen another in the series of upward revisions to foreign growth in the current Greenbook, but we have also seen greater tightening of monetary policy get built into financial markets, offsetting some of the increase in the strength of demand abroad. Moreover, the dollar has risen on balance, reducing the feed-through of higher demand abroad to purchases from U.S. producers. Business investment looks robust, albeit a little less so after Friday's data on orders and shipments. If housing takes something out of consumption, however, prospective sales growth will not be quite so strong, and this will constrain the increase in investment demand.

So, on balance, I see a moderation of growth to around the rate of increase in potential as a reasonable expectation, given the structure of interest rates built into markets. The key question is whether such a path for output will be consistent with low, stable inflation.

I think we can be encouraged by the recent data on prices and compensation. Core consumer and inflation measures have been flat or declining on a twelve-month basis over the last six months or so, despite the uptrend in energy prices. And inflation expectations have remained quite stable on balance. Compensation measures are a bit more mixed. The broadest measures, ECI and total compensation, have not picked up despite the erosion of purchasing power implied by higher energy prices and despite good trend productivity growth. In this regard, Mr. Chairman, we do see an increase in average hourly earnings of nonsupervisory workers. Maybe we are beginning to see some of this feed-through to workers on the lower end of those wages. But, overall, I think compensation growth has been very well behaved.

To be sure, we have not yet seen the effects of the recent increases in resource utilization, decline in the unemployment rate, or rise in capacity utilization—and these feed through to inflation pressures with pretty long lives. Given the flatness of the Phillips curve, it could take some time to perceive the inflationary effects if, indeed, the economy is operating beyond its sustainable potential. Moreover, the staff is looking for a notable pickup in compensation. The unit labor costs this year and next are partly absorbed by smaller markups. At this point, however, given the recent data, I would judge these potential developments to weigh on the side of upside risks to inflation rather than tilting the most likely outcome.

Both compensation and price increases have fallen short of model projections in recent quarters. While the less-than-expected effects of energy prices could explain this more favorable relationship of output and inflation, we can't reject the hypothesis that we are seeing something more fundamental developing, especially on the supply side of the economy. Recent data suggest it is not an unexpected increase in productivity. Some combination of the lower NAIRU and the anchored inflation expectations alternative simulations in the Greenbook or other factors could be

holding down wages and prices. It is far too soon to say whether anything is going on or to tease out the policy implications, but we would do well to remember just how wide those confidence intervals are, how little we know about price and output determination, and especially how little we know about the level and growth rate of potential GDP. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you, Governor Kohn. With apologies to those who have not had a chance to speak, I think we could adjourn now. Let me just remind you that it is especially important, given that this is a meeting in some sense still in progress, that we maintain full confidentiality about the discussions we're having in this room. There is a reception and dinner on the Terrace level of the Martin Building, and I will see you there shortly.

[Recess]

**March 28, 2006—Morning Session**

CHAIRMAN BERNANKE. The meeting is reconvened. We want to complete our go-round. President Poole, are you ready?

MR. POOLE. Okay. Mr. Chairman, it is a great delight to see a 200 percent increase in the number of beards around this table. [Laughter] Half of that was in my point forecast, and the other half was not. [Laughter]

The contacts that I've talked to recently are very optimistic about activity—with one exception, which I'll start with. My contact at a major trucking firm said that he sees what he called a little bit of a slowdown. Volume is essentially flat year over year across all regions and products. He doesn't have an explanation, but he's the only one of my contacts who had anything negative to say about the situation.

My contact at UPS had some interesting comments. He said that both UPS and FedEx together have their networks operating at a higher level at this time of year than they have ever seen and that, at the fourth-quarter peak, they will not be able to meet demand without some new strategies. In particular, they're going to use pricing and incentives, I guess, to try to reduce some demand that is less profitable. They will be working with customers to ship stuff out on Sundays that previously went on Mondays, that kind of thing. But he says that, unless they do that sort of thing, he anticipates that they will be unable to meet demand in the fourth quarter. Of course, they talk with their customers all the time, and they're very optimistic. They have had very good earnings statements, as you may have seen.

My contact with Wal-Mart said something that I thought was very interesting, which I'm going to try to explore in more detail. He said that their wages, and these are for hourly workers (possibly just for sales associates), are absolutely flat—no increases whatsoever in the last year and



no increases planned going forward. Individual workers are getting some increases, which probably average about 1 percent, as a consequence of seniority. They have a pay scale by which workers are paid more after they have stayed there some months—I don't know exactly how many. And I think they also have some productivity or performance bonuses built into their pay structure, but the structure has not changed at all, so wages are increasing about 1 percent year over year. He said that about 20 percent of their associates are part time and that they are going to be increasing that share to 40 percent so they can staff at peak times and get more productivity out of their workforce.

On a national basis, the main thing I'd like to comment on is construction, and I'll start with a local story. There is an absolutely tremendous boom in nonresidential construction going on in St. Louis. As a consequence of our own building project, we have close contact with the construction industry in St. Louis, and our people received a spreadsheet listing of projects in the city. I will start with the bottom line and give you some examples of the kind of thing that is taking place. The average St. Louis construction volume is \$600 million to \$700 million a year in nonresidential construction. Now, listed in this table are multiyear projects, some are two- and three-year projects, starting last year and this year. The total here is \$5.681 billion. It is probably several times over the normal annual volume in St. Louis. To give you some examples, there's \$930 million worth of casino projects, including casinos and some casino hotels. So we're building casinos. I guess in Dallas they're building condos.

PRESIDENT FISHER. Same thing. [Laughter]

MR. POOLE. Well, Washington University has \$200 million worth of projects. Reconstruction of Interstate 64 through the city is \$500 million. A cement plant, \$800 million, is being built south of St. Louis. There are hospital projects that add up to about \$525 million, waste water treatment plants, \$165 million, and a whole slew of other things here. I do not think there's

anything on this list that is multifamily housing. This is all nonresidential. I have a suspicion that we have much stronger nonresidential construction in the works than is visible to us. If you think about our formal statistical process, we do not really pick up much of that in advance, and I would recommend that the staff put together a special Beige Book survey next time, trying to get an idea of what sort of contracts or expectations are out there. The architects know it. The companies all know it. But we don't have that information collated, and I think it might be very helpful.

I note also that the housing industry is very visible, and there are reports almost daily of guesses about softening in that industry. A lot of the resources, such as cement and labor, are perfectly interchangeable between residential and nonresidential construction. So we may find with the visibility of the housing industry that the market will read some signals of a softening economy in the construction area when, in fact, there is a tremendous amount of "stealth strength" that we are not observing that is coming from the nonresidential side. I noticed that in the Monday pre-FOMC briefing you had a special discussion of business fixed investment in general, and I think that was focused on equipment and software and not on the construction side. But I'm guessing that we have a lot more strength in the works than appears in front of us. My UPS contact said that they are expanding their Louisville hub facility. Let's see what the total was—something over a billion dollars that they are going to spend in expanding their Louisville hub.

I would say one other thing. On the inflation issue, firms don't say very much about their own price increases except when they have problems passing on cost increases. They may complain about some of the cost increases they're seeing. We do not hear very much of that. We hear a bit of it, particularly regarding fuel, and we still get health insurance costs. Except for that, we do not hear very much, but I think we are going to have to ask very explicitly in order to extract from firms what they are doing on their own pricing front because it is not something that they

naturally volunteer. All their own price increases, of course, are fully justifiable and sensible, and only the cost increases that they are having trouble absorbing are a problem that they would bring to our attention. Thank you.

CHAIRMAN BERNANKE. The comment and suggestion on nonresidential construction is very helpful, very interesting. On the Wal-Mart wage increases of 1 percent—hasn't Wal-Mart increased health coverage and compensation overall?

MR. POOLE. Yes, this is the straight hourly wage. They do have some benefit cost increases. I think that, in their budget, they are expecting 7.8 percent over the course of this year. They have been changing the structure of their benefit programs. And the other thing that my contact there said, although I didn't talk to him about it this time, is that they're observing lower utilization—that is, apparently they believe that a lot of the low-wage demographic, as they put it, is somewhat stressed. They see that in their own sales in terms of the kinds of things that people are buying. They say that there is a lot of strength at the upper end of their demographic and weakness at the lower end, but their own labor force is using health care less intensively than before, perhaps because of the pressures from absorbing energy-price increases and that sort of thing. So the copays that they are charging—the deductibles—are enough to reduce the utilization. That is why the outlay they are expecting is up only 8 percent. I am sure that the cost per unit delivered is rising more quickly than that, but there is lower utilization.

CHAIRMAN BERNANKE. Thank you. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. In preparation for today's meeting, I talked with the CEOs of three banks—one major money center, one major East Coast regional bank, and one major West Coast—that pretty well have the markets covered. There have been times when those conversations have either been directionally or substantively at odds with, or maybe ahead of, our

Greenbook and our preparation data, but not this time. The conversations pretty well corroborated or were consistent with both the Greenbook and our flow of funds data. They all reported that, into '06, consumer loans remain strong with good prospects for growth. Asset quality remains very good, above levels that historical experience would suggest they could maintain. Interestingly, we had that message a year ago, that asset quality was better than what they thought they could maintain through their normal credit review process, and that situation continues. Commercial lending continues to be solid for both large and small borrowers, but the utilization of credit lines still remains at about 50 percent. So it means that we are moving up from a very soft commercial loan market and may, in fact, be consistent with what President Poole suggested.

This comes back to a question that President Hoenig raised yesterday. The markets are much more concerned with event risk than with inflation risk—which is to say, issues like major energy disruptions, terrorism activity, or even weather-related activity. This means that risk avoidance tends to be, to a significant extent, related to geography or market segment.

Two particular areas struck my contacts and, therefore, me as being unusual and worthy of comment. One of them relates to a significant change in the market for initial public offerings, and this particularly came from the West Coast. The expectations for start-ups, particularly tech start-ups, are much more stringent on the West Coast. A couple of years ago, a very good idea could generate a significant IPO experience, but now a good idea plus five years of solid cash-flow experience might result in half the level of an IPO that they would have had fairly recently. The venture capital side of the business notices that very significant change. A start-up today is much more likely to end up being an acquisition candidate than an IPO, and the reason for that may be varied. Part of the reason might be caution, but a lot of it is being attributed to the additional regulatory burden, particularly the Sarbanes–Oxley regulatory burden.

In the money center, the liquidity in the market is provided significantly by the institutional investors, and the activity on the loan side is to a great extent in structured credit. The collateralized loan obligations and the collateralized debt obligations are providing a lot of that activity. One significant change that is sort of consistent with the IPO experience is that, in many cases, internationally active businesses are more apt to go offshore for either debt or equity and do it as a private placement rather than do it in the United States. Also, the banks that are active internationally can follow the flow either through a direct transaction or through some sort of a collateralized arrangement that can provide the financing, so an international customer has a distinct advantage in doing business with an international bank.

An overall reflection on the economy: Consumer activity remains strong, but flattening of real estate equities will certainly restrain the wealth effect on consumption to some extent. In the so-called bubble markets, we are clearly seeing prices drop. In the mortgage business, the purchase mortgages are very active, but refinancings are almost entirely eliminated. There is a significant disparity between U.S. and offshore markets in terms of regulatory reporting requirements, and that is becoming increasingly apparent and has become a factor in both credit and equity issuance. Notably there is a significant absence of concern expressed about inflationary pressure: None of the three CEOs expressed concern that they are feeling the effect of inflation. Thank you.

CHAIRMAN BERNANKE. Did the banks comment on the yield curve; is it affecting them?

MR. OLSON. We did not hear much comment. I expected to hear much on the yield curve, but I did not have any specific comments.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman, and thank you to everyone around the table. I think Governor Kroszner and I share the view that people have been incredibly kind and supportive in teaching us the ways of this institution in the past weeks. So we certainly appreciate that. I know I do. The only advice that I was given last night that I will not take is that they say that Governors at their first meeting should sing their opening remarks. [Laughter] I thought it was a joke, but I guess that we'll test it here. [Laughter]

Allow me to offer just a few perspectives consistent, I think, with a lot of the discussion yesterday and maybe some particular focus on business investment. As was discussed, the economy appears to be stronger, but as I think about the economy today versus over the last several periods, what strikes me is how much more well balanced it is than it was over recent periods. The equity markets, the credit markets, and certainly the anecdotal information that I've gleaned in my several weeks here and before, all tend to confirm that view. And although there are meaningful risks to the economy, my own view is that there is a greater upside potential for growth than expressed in the Greenbook.

A few notes about the consumer before I spend the balance of my time on business investment. First, the consumer appears to be strong, as we discussed yesterday. And my own sense is that, while there may well be softening in the residential market, staggered repricing of adjustable-rate mortgages and perhaps potential sales of a very novel, new housing product—the thirty-year fixed-rate mortgage—[laughter] may simplify things, particularly if the shape of the curve keeps its current trajectory. Second, I would expect there to be, as I think the Greenbook referenced, accelerating household income growth and perhaps new job creation more robust even than was described in the Greenbook, particularly if some of the productivity gains that we have seen over the past several years tend to moderate.

Let me spend a few more moments now on the business capital expenditure side. My own view is that the strength of business capital expenditure in property, plant, and equipment may well surprise to the upside. I think what we saw earlier in this recovery, both anecdotally as well as in the data, was a growth in cap-ex by a lot of the small and medium-sized businesses. And as one CEO said to me a couple of weeks ago, big company CEOs have now gotten that memo. Opportunities to drive profit margins through productivity improvements appear to be diminishing somewhat, and so there appears to be a tendency, a greater willingness, to go back to the well and to get cap-ex back up to speed. Two obvious indicia of greater cap-ex—which we've seen for some time and that would have suggested to many of us, including me, that business cap-ex would have ramped up sooner—are, of course, the strong corporate profits and these corporate balance sheets that are in remarkable shape.

What I would like to spend a little time on is, well, what is new? What is going to make cap-ex grow over 2006 above and beyond the projections to this point? And so, as I talk about two other catalysts, I would suggest that they are not really reflected in the data yet. But my own sense is that we should see them or at least there is a greater probability of seeing them in the balance of the year. Of course, current regulatory and enforcement issues are still consuming significant CEO time and significant director and officer time, and that does tend to cast a rather deep shadow over these cap-ex budgets. What we are going to find in this proxy season is an occupation or preoccupation, both in the business press and in some boardrooms, with the ongoing fight over majority election of directors. There will be fights in boardrooms, fights by institutional shareholders, and a whole range of op-ed pieces about how these directors get put on boards and whether the system should be reformed. Obviously, the current environment and the fight over

shareholder democracy still tend to cast a bit of a shadow. So I guess the question really is, what's different now?

I would note two catalysts. One is CEO confidence. I think Governor Bies yesterday referred to this in a couple of the surveys. CEO confidence—that look in their eyes, their view of the animal spirits—appears to be back in stronger measure than I at least have heard in some time. What then happens when CEOs go into the boardroom, as I think most of my colleagues around the table know, is that they tend to generate some excitement by directors themselves. Directors are really starting, in some regard, to go back to basics. One CEO said to me about a week ago, “Being a board member is starting to be fun again,” and that is not something this particular CEO, who is on a lot of large-cap boards, would have said a year ago. I don't think he was referring to the days of going to the golf course in the middle of the board meeting. What he meant by the board's being fun again is that board members are focused on where the company should be going. How should they be growing their business? Should they be more vested on the mergers and acquisition side? Should they be more focused on capital expenditures? And so from that CEO and from many others, we are hearing far fewer complaints about Sarbanes–Oxley. It does not mean that the complaints are not there, but my sense is that most of these companies have now been able, at least, to put a box around their compliance burdens. They have been able to check that box, go through their 404 controls once or twice, and though they still do not like it, the burden is no longer consuming their minds when they come to the boardroom.

I think what we are going to see in the balance of 2006 are board members coming back to boards as “strategic advisers,” with a somewhat diminished role for board members as “compliance officers.” And that is a good thing with respect to cap-ex because the more they are focused on their businesses, the more they are focused on helping companies grow. I think that such focus is



probably incrementally quite positive to a decision about investing the next billion dollars in property, plant, and equipment. So looking outward, I sense that companies are seeing bigger and bolder opportunities, and that situation is a necessary precursor to understanding whether or not these cap-ex numbers increase.

The second catalyst that I note may be a touch more controversial—how outsiders are looking at companies. I guess the way I would say it is not that the barbarians are back at the gates but that they are gathering. When you look at the private equity world, the leveraged buyout world, and the emerging hedge fund world, the “outsiders” are now looking at each other in a series of alliances and are starting to look with a keener eye toward corporate America. They probably have seen the excess cash and, frankly, the conservatism of boardrooms and the conservatism of companies borne in the past five years and are willing to “think the unthinkable” and take greater advantage of that opportunity.

I think Governor Olson made reference to the IPO market, which is really telling us many of the same things—whether a company that is public has, all of a sudden, a new interest in going private or an IPO candidate is saying, “Really, what is in it for me? Why should I enter the capital markets? Might we make better use of our time and attention by staying private, by growing cash flow that way?” Another reason that the IPO market is not as robust as perhaps it would have been in previous periods like this relates to research. You have to be a very big and very bold company to be getting large, bulge-bracket firms writing equity research and explaining your company to a greater pool of shareholders. For an IPO candidate or even for a public company that has been around awhile with a few billion dollar market cap, getting that kind of research and that sort of investor base is much harder to do than it was in the years before Sarbanes–Oxley.

Another item I have considered is merger and acquisition backlogs. The backlogs that are on file by the largest investment banks and merger advisers are bigger now than they have been in the past six years and maybe even before that. The difference in the backlogs this time versus in previous years, I think, is how much is really private equity. It looks as though, in broad numbers, about a quarter to a third are private equity investors, LBO investors that are looking at companies that, because of size or background, they would frankly not have spent as much time looking at in years past. You have a range of LBO players that are now back, and they are now describing themselves as shareholder activists and corporate governance experts. But twenty years ago they were there, and they were focused much as they are now on shareholder value.

So both the signs—from companies that are internally evaluating their own boardroom dynamics and from investment companies that are looking to come to the gates and to take a couple of these companies private—remind us that companies have a perspective about their own cash that is either use it or lose it. And it would not surprise me to find some very large “blue chip” companies that feel either under attack or on the precipice of being attacked tending to be bolder in their capital expenditure budgets.

What’s likely to happen in the capital markets should that all come to pass? One thing that may happen, and may be a first casualty, in the investment-grade capital market is that some very large-cap “blue chip” companies with exceptional investment-grade ratings will all of a sudden find that they are in play by some LBO buyers and private equity participants. As you all well know, generally in the investment-grade market there has not been much of a change-of-control premium in investment-grade credit, unlike in the high-yield market. But should a couple of large transactions occur either here in the United States or in Europe, where a double-A credit one day ends up looking more like a high-yield credit the next, we might find that investment-grade

investors are asking for a greater premium in those markets. I think all of this is a possibility as we think about '06 and '07—not a promise but a real possibility that we should continue to keep a keen eye on and evaluate. As that dynamic goes forward, we will have an early signal telling us whether the cap-ex numbers will come in larger than expected.

Finally, with respect to inflation, I would add to some of the comments that the Vice Chairman made yesterday by noting that long-term inflation expectations as calculated in the TIPS markets, while contained, are higher than ideal. And the market expectations of potentially higher commodity prices and other material inputs might also cause further pressure on inflation. As we as a Committee approach our last step or our penultimate step in possibly moving rates, the markets will be more and more focused on our own vigilance with respect to those inflation expectations. With that, I have finished.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. I received the same advice that Kevin did. [Singing] “To dream the impossible—” [Laughter]

CHAIRMAN BERNANKE. Any two-handed interventions? [Laughter]

MR. KROSZNER. Obviously, from the remarks that we heard earlier today and yesterday, there is an enormous amount of strength and resiliency in the economy. Clearly, the economy has rebounded from a temporary slowdown in the fourth quarter. The specifics that I have heard from each of the Districts confirm the broad Greenbook view that this is going to be a pretty strong quarter. I particularly like the quotation from President Fisher that it will be “blowing and going” during this quarter. A forecast of 3¾ percent real GDP growth for 2006 with perhaps a bit of slowing in 2007 seems quite reasonable given the data that we have in hand. Consumption remains

solid, and despite some less-sanguine reports at the end of last week about some orders, business investment still appears to be reasonably strong.

Since there seems to be much agreement with the central tendency of the forecast, rather than review my reasons for supporting it—and I support most of the reasons that people put forward—what I want to do is focus on a few potential risk factors going forward. Not that I necessarily think that these things are likely to happen, but as Dave Stockton mentioned yesterday, there are a number of uncertainties in the forecast, which we need to focus on: First, with respect to housing; second, with respect to energy and commodity prices; and, third, with respect to expectations in the yield curve and the term premium issues that the Chairman asked us about yesterday.

We have been receiving some mixed signals with respect to the housing market, although the components that tend to have the most information for assessing the future direction of the market, permits and sales of new single-family homes, suggest some considerable cooling from the very hot period in 2005. The evidence that I have from talking to property developers in the Chicago area and a bit in D.C. seems to be consistent with this evaluation, particularly in things like the condo market. We see a lot of slowing there, particularly in the Chicago area—at least from what I have heard anecdotally. Not only are we faced with the forecaster's typical dilemma of trying to predict a trend break or a turning point, but we also have relatively few experiences in the United States over the last few decades of a downturn in the housing market. So the key concern is going to be the effect on wealth and on consumption and obviously also on the construction market.

In the Greenbook, I believe the direct contribution of wealth to real PCE growth was approximately 1 percent in 2005, and the forecast is about  $\frac{3}{4}$  percent in 2006, with at least half of each of these increments due to housing wealth. So, obviously, we have to be very sensitive to the

concerns there. In some countries, such as the United Kingdom and Australia, even some relatively moderate downturns or slowdowns in the housing market seem to have been associated with some fairly important GDP effects.

President Stern yesterday made an important point of what's driving what. Many of the discussions about the housing market suggest that there will be some sort of exogenous shock that somehow may send the housing market down, as opposed to the housing market's being part of the broader economy in which there are consumption demands for investment and in which houses are an asset as part of a portfolio. It is important to put housing in that context. In the other countries where we have seen downturns and GDP effects, it is hard to pull out what part was due to housing's lead as opposed to housing's just being one of the factors affected by a general economic downturn. So with those caveats in mind, and obviously we have to be careful about extrapolating from other countries' experiences, I do think we should be mindful of the potential risks that are there.

Second, energy and commodity prices: So far we have been very fortunate in seeing little, if any, of the run-up in energy and commodity prices feeding through to core measures of inflation, and from what I can tell in the discussions relating to the Greenbook, this has been a bit of a surprise to the staff and a bit of a surprise to the Committee. Now, this may well be due to a confluence of very fortunate factors that perhaps could be reversed in the near term, or it may be due to some longer-run changes, which President Fisher discussed. We had some discussion of this yesterday. So, as you know, productivity growth and international competition could be important factors, but at this point I do not feel that I understand enough whether this situation is just temporary and we are lucky or whether it is part of an ongoing process. And so I think we just have to be mindful of the potential risk there. And obviously with the uptick in forecasts for growth outside the United

States, which could be associated with an increase in demand for energy and raw materials, further upward pressure could be put on those prices.

Finally, inflation expectations in the yield curve and term premiums: Fortunately, generally the market-based and survey-based measures of inflation seem to be fairly steady, reasonably well contained. I share Kevin's concern that some of these expectations being above 2, 2½, even in some cases closer to 3 may be a bit of a challenge, but broadly the numbers that we have been seeing around 2 seem to suggest that inflation expectations are well anchored. And it seems that one of the great achievements of this body that I have now been very fortunate and very honored to become part of is the reduction of inflation uncertainty and the reduction of inflation expectations. And these reductions, I think, help us at least in part to understand the very low term premiums that we have been seeing in the United States.

But we must also recognize that we have been seeing lower real and nominal rates and generally lower term premiums around the world. In talking to market participants, I hear much less of a fear of an inflation spike in many countries around the world—not that there was a fear of an inflation spike in the United States—but I think a greater certainty about the direction and focus of the FOMC and a greater trust is extremely important.

This gets back to a point that President Lacker made yesterday about the incredibly important role of expectations. What we do has to be seen not just in terms of the traditional backward-looking role of thinking about how the higher cost of capital could affect choices that people make, but also about our credibility in going forward. Choices that we make may have opposite effects on interest rates than what we have seen in the past. Raising interest rates in the short-term may have a damping effect rather than an increasing effect on longer rates.

If you look to forecasts of economists outside this room and the System, you also see a fair amount of optimism, suggesting growth in the future. So the lower real and nominal rates in the longer-term markets do not seem to be due to concerns about significant slowing of the economy but to differences in views about inflation uncertainty and the level of inflation going forward. So, particularly since some of our measures—of core PCE, core CPI—are at or toward the upper end of the range of where I would feel comfortable (and, I believe, from what I have heard, a number of others around the table would feel comfortable), we have to be vigilant about that. Maintaining our credibility and the good work that this Committee has done is something that I want not to become dreaming the impossible dream but something that is the reality and that we can continue. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. I would like now to summarize these views and add a few comments of my own. At that point, if there are additional comments or questions, they will be welcome.

We have had, I think, a fairly upbeat group here the last couple of days, which is of course good, both in terms of views of economic activity and in terms of keeping inflation well controlled. The economy appears to be quite strong, but my sense is that most people feel that risks on that score are relatively balanced, which I take to imply that, after being strong in this quarter, growth will slow to something closer to a more-sustainable pace in the remainder of the year. Perhaps the leading source of uncertainty on the output side is the housing market, but I was reassured to hear that most participants think that a decline in housing will be cushioned by strong fundamentals in terms of income, jobs, and continuing low interest rates. The labor market is clearly continuing to strengthen, but I heard not too many concerns about increasing wage pressures. There was some discussion about shortages of more highly skilled workers, which presumably might affect wages at

some point but apparently has not so far; and there was additional discussion of productivity gains, which are helping to keep unit labor costs down and to support growth.

On the inflation side, I have not been in this conversation for a while, but I was impressed at least relative to a year ago that the angst about inflation seems to have declined. Clearly, inflation expectations are well anchored. Margins are high, and the sense of the group was that pass-through to consumer inflation was likely to be limited. Still, I took from the group some sense of at least a slight upside risk to inflation, reflecting the increasing resource utilization; the fact that inflation is somewhat on the high side of what many people describe as their comfort zone; and the fact that, if inflation does rise, there will be costs to bringing it back down and maintaining our credibility.

So that is my overall summary of the Committee discussion. My own views, you will probably not be surprised to hear, are not radically different from what we have heard around the table. I would point out, first, that except for housing, the economy continues to be very strong. One might be tempted to average the expected rate of growth of the first quarter at about 4½ percent with the 1½ percent of the fourth quarter and say we're at a pace of about 3 percent, but then I would remind you that we had 4.1 percent in the third quarter despite Katrina and about 3.7 percent average growth in the first three quarters of '05.

We have a strengthening world economy. We have consumption that looks likely to be well supported by income and jobs. Several people have talked about the strength of investment in nonresidential construction. Job creation at about 200,000 a month is clearly above the long-run sustainable rate. So except for housing—and that is, of course, a critical sector—it looks as though the economy is, if anything, growing more quickly than potential.

Housing is the crucial issue. To get a soft landing, we need some cooling in housing. So far there is a good bit of evidence that there has been a peak, but we do not know a great deal more than



that. So obviously we are going to have to watch carefully. The range of possible outcomes is quite wide. I agree with most of the commentary that the strong fundamentals support a relatively soft landing in housing. A pessimist might point out that the expectation of future price increases is itself an important part of the user cost of housing. A sea change in people's views about what is going to happen to house prices in the future might significantly affect their perceived cost of owning a house and lead to lower prices and to weaker activity. On the other side, residential investment is, of course, only about 6 percent of GDP, and so long as consumption is well maintained by incomes, jobs, and other factors, I think it would take a very strong decline in the housing market to substantially derail the strong momentum for growth that we are currently seeing in the economy.

What we might see in the next few quarters is some quarter-to-quarter variation. We may not have the stability of growth that we have had the last couple of years. If that happens, we should be willing to accept it. I might offer a very rough analogy to the way we think about energy prices and core inflation. With core inflation, our goal is to accommodate energy prices but to make sure that they do not get into the underlying rate of inflation. Again, this might be a rough analogy, but if the housing market moves significantly, we should perhaps not try to upset that movement but rather just try to ensure that the resources that are released are deployed in the rest of the economy and that the rest of the economy remains on a stable path. Again, I think we are unlikely to see growth being derailed by the housing market, but I do want us to be prepared for some quarter-to-quarter fluctuations. So, broadly speaking, I agree with the Committee that we should see some cooling for the remainder of the year and that we should approach a more-sustainable pace of growth. But I think there is some upside volatility risk, if you will, because of the fluctuations in residential investment.

On inflation, like most of you, I am struck by how well behaved core inflation has been. Indeed, in 2005, core inflation was even slightly lower than it was in 2004, and we have all pointed to a number of explanations, including well-anchored inflation expectations, international competition, productivity growth, and since I wasn't here, I can say good Fed policy. [Laughter]

One area of uncertainty in trying to look forward is unit labor costs. Remarkably, unit labor costs in the nonfarm business sector grew only 1.3 percent in 2005, but as was already mentioned in the staff presentation, I think that understates the trend because it is coming off the surge in the fourth quarter of '04 in bonuses, stock options, and other types of one-time compensation. If you smooth through that bulge, it looks as though the underlying trend of unit labor costs is more like 1.7 percent, and perhaps that may have some upward bias. There is certainly a lot of uncertainty about that, though. We have seen some indicators, such as average hourly earnings, rising. Other indicators, such as the employment cost index, are slowing. I just point this out as a significant source of uncertainty, given how difficult it is to forecast both compensation and productivity going forward. So, again, the stability of inflation in the last couple of years is very reassuring.

I would note, however, that over the past three years, since 2003, we have seen a pickup in inflation. That was, of course, by design, but I think it is important for us to think about why that happened. There's something of an identification problem here. To the extent that the increase in inflation over the last two to three years reflected the pass-through of energy costs and commodity prices, that is actually good news in a sense because, to the extent that those factors soften and flatten in the coming year, we should see some reduction in inflation in '06 and '07. To the extent that inflation increases in the last two and a half years reflected increased resource utilization, the strength in the economy, and the return of pricing power, however, there is a bit of concern that we may see some additional updrift of inflation in the next few quarters.

Like most of you, I am not at all alarmist about inflation. I think the worst that is likely to happen would be 20 or 30 basis points over the next year. But even that amount is a little disconcerting for me. I think it is very important for us to maintain our credibility on inflation and it would be somewhat expensive to bring that additional inflation back down. So my bottom line on inflation is that there is a very modest upside risk. Again, I think it's not a large risk but one that we probably should pay attention to.

Are there any comments or questions to close our round on the economic outlook? If not, we can move to the policy round. In a moment I'm going to turn to Vincent to introduce the policy options in the statement. Before I do that, I just want to note that we have left unresolved the discussion about the ownership of the statement—in particular, what we are voting on when we vote at the end of the meeting. Currently we vote on the action, on the directive, and on the risk assessment but not on the rationale. The rationale has, however, been largely a consensus paragraph worked out by the Committee. My sense is that this decision is not entirely separable from a wide range of other issues we may want to talk about over the next few quarters concerning the content of the statement, its structure, whether we use forward-looking language, and whether we consider adopting some kind of numerical guidepost for inflation.

And so what I would like to do, if it is okay with the Committee, is to maintain the status quo for today in terms of our voting in this statement. By the next meeting, in May, I will come back to the Committee with a proposal for a process by which we can address this whole range of issues over a period of time, and on the top of the agenda for that process will be the ownership of the statement. Is that acceptable? All right. Seeing assent, we will maintain the status quo on the statement just for today. Vincent, whenever you are ready.

MR. REINHART.<sup>2</sup> Carol Low will be handing out some material. Market participants expect you to take another  $\frac{1}{4}$  point step today along the journey started in June 2004. As can be seen in the top left panel of exhibit 1, the current March and April fed funds futures contracts, plotted as the first two observations along the black line, are consistent with the funds rate target moving up to  $4\frac{3}{4}$  percent this afternoon. Compared with what was expected just after your January meeting (the red line) financial prices indicate increased expectations of an additional  $\frac{1}{4}$  point firming in coming months. This ratcheting up of the policy path was due in part to economic data that mostly ran on the strong side of expectations and to the absence of a signal from any of you that the tightening cycle was drawing to a close. The Desk's survey of primary dealers, highlights of which are noted in the top right panel, is also consistent with the certainty of action today and suggests the anticipation of little change to the statement and the retention of the assessment that the risks to the outlook are tilted to the upside.

As plotted in the middle left panel, options contracts on fed funds futures settling after the June FOMC meeting put the largest probability weight on one more  $\frac{1}{4}$  point firming after today and about equal but less weight on the process of tightening ending after today or continuing after May. The dotted staircase in the middle right panel shows how far you've come along the path begun at the June 2004 FOMC meeting:  $\frac{1}{4}$  point steps at fourteen successive meetings. The solid line plots the expected federal funds rate derived from money market futures price prevailing just before the June 2004 meeting. As can be seen, your policy firming through last winter about matched the track anticipated at the onset of the cycle. It has been only in the past five meetings that you picked up the pace relative to market expectations of nearly two years ago.

As to why you might have tightened more than investors originally expected, the answer is not evident in the bottom left panel, which gives the evolution of the staff forecast for real GDP growth for 2005, 2006, and 2007 over successive Greenbooks. If anything, the outlook for real growth has moved a touch south over that period. But as shown at the bottom right, the staff outlook for inflation back in June 2004 was decidedly more favorable than what has materialized since, reflecting, among other factors, the more-favorable prospects at the time for the prices of oil and other imported items. If investors also underestimated the extent to which inflation would rise, then it wouldn't be surprising that they would also have underestimated the extent of your policy tightening thus far.

Concerns about the prospects for inflation lie at the heart of the case for adding another  $\frac{1}{4}$  point step to this tightening episode, the subject of exhibit 2. Policy tightening to date has brought the real federal funds rate, the solid line in the top panel, past the middle of the range of staff estimates of its equilibrium. Bringing the nominal federal funds rate to  $4\frac{3}{4}$  percent would put the real funds rate at the top end of that red range, although still well in the middle of the confidence band around

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

those estimates. Such a stance, though, would be called for if you viewed inflation as uncomfortably high in your preferred range or poised to rise from its current level.

How deeply those possibilities are felt marks the difference between alternatives B and C in the Bluebook—that is, between signaling a modest or a strong inclination to tighten at the May meeting. Market participants, to be sure, are confident of a tightening today and put high odds that you will follow with another such action in May, in line with the assumption in the Greenbook. Alternative B was designed to validate those expectations and would be preferred if you viewed the staff forecast in the bottom left panel of an unemployment rate under 5 percent and inflation near 2 percent to be both plausible and acceptable. The Committee might want to project a firmer stance of policy—that is, a sure tightening in May and a chance of further action as in alternative C—for several reasons. Chief among them might be some mistrust of the main mechanism producing slowing in consumer spending in the staff forecast—namely, the deceleration in house prices plotted at the bottom right. Although anecdotes of slowing in the housing market abound, you might not be ready to sign on to that outlook until more convincing evidence is in hand.

I now turn to the question posed at the top of exhibit 3. When are you going to stop? According to surveys and, as shown in the top left panel, futures markets predict that you'll most likely cease tightening by June. The policy rules plotted at the top right would predict a quicker end than that—indeed, they see some odds that you would already be done. Another perspective is given in the middle panel, which plots as the red line the long-run expected short rate consistent with the staff's arbitrage-free model of the term structure. The current short rate, the dark solid line, has already marched up to that long-run level.

You might view arguments for further tightening to be problematic for a number of reasons. The solid line in the bottom left panel plots the Greenbook forecast for real GDP growth. It not only slopes downward, but its historical confidence regions also encompass a significant possibility of subpar growth, as in the lower shaded region. True, there is an upper shaded region, too, but if your own outlook lies below the Greenbook path or you weigh the lower outcomes more heavily than the higher ones, then you would want a lower, not higher, federal funds rate. The standard argument for further policy action is that its absence would risk inflaming inflation expectations. As shown in the bottom right panel, however, inflation compensation at a long horizon has remained very subdued.

The Committee's choice of the funds rate target is only part of its decision. Some wording issues are considered in exhibit 4. In alternatives B and C in the Bluebook, we kept the risk assessment tilted toward tightening, as in the top panel. But as shown directly below, the confidence bounds surrounding estimated policy rules (the green region at the left) or inferred from money market options (the blue region at the right) are quite wide. This suggests that the time will soon arrive when you will no longer be confident in predicting the likely future direction of your next action. If any

of you thinks that time is now, we did offer words for a balanced risk assessment in alternative A.

Another sentence offered in alternative A is in the third row of the exhibit. The statement could end, “Nevertheless, future policy action will be determined by the evolution of the economic outlook as implied by incoming information.” I admit that those words don’t mean anything different from what appeared at the end of the January statement—and were repeated in alternatives B and C. I had the hope, though, that changing the language might draw attention to the sentiment. Despite the presence of that data-dependent clause in previous statements and its reinforcement in successive minutes, market participants seem more focused on the messages they are receiving from you than from the economic data. For instance, as noted in the bottom row, the response of the two-year note, measured along the vertical axes, to surprises in nonfarm payrolls, measured along the horizontal axes, had been elevated from 2003 to 2004 (that’s the middle scatterplot). However, over the past 1¼ years, as can be seen at the far right, the response has been more subdued, perhaps necessitating a reminder to markets to look to the data.

I’d like to point out another design aspect of alternative A, which is provided in the latest version of table 1 at the end of your handout. As is evident, we squeezed a lot of words into that column. We did it for two reasons. First, it seemed appropriate for the Committee to offer an extended rationale for ending a tightening phase that has lasted nearly two years. Second, as you become less sure of your future policy action—remember, this alternative has a balanced risk assessment—you might want a fuller description of the economic outlook. By the way, a longer statement might give you the opportunity to rely less on imprecise adjectives and more on a recitation of key facts. We tried that out last week with our first draft of table 1, but the few of you who commented were deeply enough opposed that we struck the numerical reference.

I’d also like to point out changes made in the table overnight in light of your discussion yesterday, which are provided in blue and seem mostly consistent with what was said earlier this morning. Meeting participants emphasized that growth rebounded strongly and appears likely to settle to a pace consistent with that of the economy’s potential to produce. As a result, the risks to the growth outlook appear roughly balanced. In alternative B, we added some forward-looking language to that effect in row 2. Because many of you seemed a bit more optimistic about the prospects for inflation, we repeated the qualifier “possible” from the January statement in front of “increases in resource utilization” in row 3 for alternatives A and B. The other minor changes were made for stylistic reasons.

CHAIRMAN BERNANKE. Thank you. Are there questions for Vincent?

MS. MINEHAN. I have a small question. Vince, in your scatter diagram, you seem to be inferring—at least the way I heard you say it—that, based on the last couple of years, people are

looking more to what we say than what we do. What we say has been a lot of the action over the last couple of years. Do we really have enough data to make that assessment—that, in fact, markets won't, going forward, be more sensitive to the data than to what we say?

MR. REINHART. You are right—there are not a lot of dots in that bottom right scatter plot.

MS. MINEHAN. And we pretty much have told them for three years to listen to what we say.

MR. REINHART. We did include a box in the Bluebook that showed a more systematic look at the response to data and that was not looking just at the payroll employment surprise. It was looking at eleven different surprises. And it was the case that the response, no matter—Governor Kohn is grimacing, but that's okay. [Laughter]

MS. MINEHAN. One of his favorite charts, I think.

MR. REINHART. I can tell.

MR. KOHN. My favorite facial expression.

MR. REINHART. It's toward the back if you want to refer to it. But the point is, the response has moved down. What is actually interesting is that, if you split these data observations into real side and inflation, the response to inflation data has come down the most, consistent with the view that they think that the Federal Reserve has actually contained inflation and also consistent with subdued inflation expectations.

MS. MINEHAN. Right.

MR. REINHART. That is a long answer to what I really should say: Yes, you are right. We don't have enough observations to really know.

CHAIRMAN BERNANKE. Two-handed intervention. President Moskow.

MR. MOSKOW. I just want to ask Vince a question on the word “possible” in the third row here. Could you elaborate on why you put that word in? It just says, the way it said before, that increases in resource utilization have the potential to add to inflationary pressures. I mean, there have been increases in resource utilization.

MR. REINHART. So some concern was expressed that having dropped the word “possible” relative to what was in January, the Committee would be making the determination that, indeed, economic slack had gone away and that the channel itself would put upward pressure on inflation.

MR. MOSKOW. But capacity utilization is higher. The unemployment rate is lower.

MR. REINHART. Right, but I think the issue there is that it is true that resource utilization has tightened, but then to make the determination that it could add to inflation pressures is to say that it, in fact, has gone past the level of full capacity—that is, the unemployment rate is below the natural rate and output is above capacity. It did not seem, at least from the discussion yesterday, that everyone would buy onto the view that the economy was working above its potential.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I take it that you would like us to give the policy recommendation that we would favor at this point?

CHAIRMAN BERNANKE. No, let me clarify. I’m sorry. We’re still in the question mode.

MR. POOLE. Oh, okay. I thought we were starting the round.

CHAIRMAN BERNANKE. No. Do you have a question?

MR. POOLE. No.

CHAIRMAN BERNANKE. Governor Olson, do you have a question?



MR. OLSON. No.

CHAIRMAN BERNANKE. We have some breakdown here in our system. [Laughter]  
Are there further questions for Vincent? President Lacker.

MR. LACKER. I am curious about the question Janet asked in a memo last week about singling out slower productivity growth or—what was it?—productivity gains. Doesn't that phrase sort of convey some implicit theorizing?

MR. REINHART. Heaven forbid. [Laughter]

MR. LACKER. Well, that seems be the point of the question. I was just wondering what you thought about it.

MR. REINHART. I would note that, in your discussion of the economy yesterday, a number of you did point out that a well-maintained trend in productivity is holding unit labor costs in check. I am not doing well in facial expressions, but yes. So I will take your objection as saying that this is, in fact, an inner working in the inflation process that is ultimately a monetary phenomenon, and it is not appropriate to single out one of the parts of a mechanism at this particular time.

MR. LACKER. So it is consistent with the world in which the policy function we are expected to follow has nominal compensation growth not responding to productivity growth changes. Productivity growth changes, and it changes unit labor costs. It doesn't change compensation growth. So it has inflation responding to changes in productivity costs.

MR. REINHART. I guess I would have to admit that the words are not that clear. What we meant rather was that, for the given increases in compensation, structural productivity growth has kept unit labor costs from expanding more than they would otherwise.

MR. LACKER. Then it is a statement like these arithmetical contributions to GDP.

MR. REINHART. Right.

MR. LACKER. Well, okay. It is a different statement.

CHAIRMAN BERNANKE. In the go-round I am interested, of course, in your view on the policy action, and I am also interested in your view on the statement. So that would also be an appropriate place if you want to raise issues about the wording. That would be fine. Other questions for Vincent? Vice Chairman.

VICE CHAIRMAN GEITHNER. Dave Stockton gave us a gentle admonishment yesterday to clarify our inflation preferences. At least that is the way I interpreted it. You can interpret it that way or that he responded to a question by suggesting that, in the absence of that clarity, [laughter] the staff should not be vulnerable to the criticism applied. But I wonder whether Vince or David wanted to say a bit more about whether it actually matters in thinking about the optimal terminal point for the fed funds rate in this tightening cycle whether we have a 1.5 percent objective for core PCE inflation over time or whether that objective is at 2. If you look at the Bluebook, chart 7—I am not sure what page that is on—

MR. REINHART. Nineteen.

VICE CHAIRMAN GEITHNER. Page 19. You can get one set of answers to that. You have not given us this time the perfect-foresight, optimal-policy-rule type of prisms to look at the same question. But could you give us just a little sense of whether it matters now?

MR. REINHART. Well, as part of the discussion from yesterday, these policy rules are pretty inertial, and in the seven quarters of data to the right of the forecast line, you're not really going to see a material difference from your choice of inflation objectives. As you can see in the table, it really means only 10 basis points for the policy rules whether you have a 2 percent goal or a 1½ percent goal. Ultimately it matters a lot, and you see that in the extended Greenbook forecast.

You see it in the optimal-control exercises we showed previously, particularly in versions of the model that involve perfect foresight. You bring forward some of that action, and so that ½ percentage point difference in your inflation goal does actually control the amount of overshooting of the funds rate that you're going to find appropriate.

MR. STOCKTON. Obviously, in addition to the importance of the target or the objective itself is your degree of patience or impatience about getting there. When we construct the extended Greenbook, in some sense we don't get to the objective very quickly just because there may be inertia in policy. That's up to you to make a decision about. Then there are the questions about how long it takes for economic activity to respond to the policy that you put in place and what transmission there is into inflation of that change in policy. And those things, at least in our large-scale model, take a long time to steer an inflation rate from one direction to another. Now, obviously, to the extent that inflation expectations can jump or move quickly, that model may overstate the degree of inertia in the inflation process, and you might be able to achieve more quickly an inflation objective with a more-pronounced change in policy. But that's not the sort of structure of the model that we are working with here.

CHAIRMAN BERNANKE. Other questions? President Pianalto.

MS. PIANALTO. Vincent, in your comments about the Desk survey and what markets are anticipating, you said that they anticipate little change in the statement. But there have been some concerns—and, in fact, even a short article in the *Wall Street Journal* today mentions—that if there is no change in the statement that was made in January, investors will probably ratchet up their rate expectations. And there is a risk that, with no signaling, after the meeting they will build two more moves into the future. Have you given any thought to how to prevent that from happening?

MR. REINHART. The words in alternative B were designed to try to keep the prevailing path for policy expectations, and that's one of the reasons they are different from what is in the leftmost column from the January FOMC statement. I think I agree with your assessment that, if you merely repeated the January statement, then market participants would have two observations in which the words "some further policy firming may be needed" imply certain action at the next meeting.

MS. PIANALTO. But then it has also built in an expectation of another action at the next meeting.

MR. REINHART. Right.

MS. PIANALTO. And so, when they expect little change, it is hard to know whether it is no change in paragraph 4 versus little change in the rationale statement.

MR. REINHART. We retained the words of row 4 but not the assessment of the economy. And that is one reason we give so many reasons that inflation prospects may be favorable—the idea that market participants would read this to mean that you are inclined toward tightening but see reasons why you may not have to do much.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. I want to echo Vince on the question raised by President Pianalto. If you look at current expectations now and as the Desk survey tells us something about the assumptions behind those expectations (though it's not a perfect proxy for them), there's a high probability of a move today, a significant probability that the Committee will decide to move in May, and little expectation of a material change in the statement and the signal. That combination of assumptions has not led to a significant probability of additional moves beyond May. That may not be terrifically reassuring against the risk you've raised. The constellation of assumptions in the

Desk survey previewed one way of judging what that risk is. But if you repeat a formulation that's similar to January's, are you going to take too much risk that people add to the probability of a third move or a second move beyond today? I think that risk seems low, but this is essentially unknowable.

MS. PIANALTO. Yes.

CHAIRMAN BERNANKE. Question, President Fisher?

MR. FISHER. Mr. Chairman, I just wanted to ask Vince a somewhat radical question. Assuming that the Committee votes to tighten another 25 basis points and the language roughly is what you have in column B, I'm curious as to what you think or maybe Dino and the others think the market reaction would be if we eliminated row 4 in its entirety.

MR. REINHART. My suspicion is that they would think you're done. No guidance on interest rates means that you're not likely to act.

MR. FISHER. So you are saying that we should tip our hand that we want to maintain or we should indicate further policy firming—sort of like President Pinalto's question.

MR. KOS. I think it is almost impossible to be absolutely neutral. The choice that you have to make is almost binary.

MR. FISHER. That is what I mean.

MR. KOS. You can take out row 4, and then the market says, "Okay. They are done." Or if you repeat the present language, then it sort of confirms, with a certainty or near certainty, that there will be another move in May and some possibility of another move after that. I think it is very hard to be purely neutral.

MR. REINHART. Essentially the Committee is repeating its frustration back in 1999, when it immediately published the directive with its announcement and it seemed that the tilt in the

directive to the effect that the Committee was more likely to raise rates than lower them was read as more predictive of your future action than many of you wanted. That is, markets moved to one of the corners and did not view it as a probability statement. I think you're in that position again. I think that one reason we added to the rationale sentence was to contain that risk.

CHAIRMAN BERNANKE. Other questions for Vince? Okay. So let's begin our policy go-round. I'm interested to hear your views on policy action, the statement, and anything else you think bears on our decision. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I think we're getting to the difficult but interesting part of this tightening cycle. It's always very difficult to be preemptive and forward looking. And with rates having risen to where they are, it's getting harder. Reacting to the most recent data does risk overshooting, and I think those Taylor rule simulations, the equilibrium funds rate calculations, and alternative B suggest we already have, or are soon to have, a small degree of restraint in the system.

Despite all this, I support raising the funds rate 25 basis points this meeting, and indicating, as in alternative B, that we may have to go further. I have a number of reasons for leaning on the side of such tightening. Resource utilization is high. We don't know the NAIRU. It could be lower, due to changes in labor market structure or foreign competition. But I think we're in a zone where we need to be very, very cautious about significant further increases in resource utilization. And I think we need to be presumptive in our policy that we're damping that down. Unless we see evidence that it's okay, unless we see evidence that prices are softening, and unless we see evidence that unit labor costs are particularly well behaved and there isn't some inflation risk, I think our presumption must be that we need to get this economy slowed to a more sustainable pace.

And I agree with your assessment, Mr. Chairman, of the strength of demand. I think without further policy increases we do risk rising resource utilization. There is still considerable strength in final demand. Some of this could be weather related. Some of it could be a catch-up from the fourth quarter. Undoubtedly it is, but we don't know how much. And I think the underlying sense is that demand is strong. What little high-frequency data we have, such as the initial claims for unemployment insurance, suggest that the labor market continues to move right along into early March. I think that stopping now or indicating that the next move would be the last would cause a rally in financial markets, and we'd be concerned that financial conditions would no longer be consistent with better assurance that the economy is going to glide in here at high levels of resource utilization rather than further increases in resource utilization.

In leaning toward restraint, I also give a little weight to the overall price increases. We've seen several years of rapid price increases in the overall CPI. There is the issue that President Lacker raised yesterday of these propagating through to core inflation through expectations. But it is also not entirely clear to me that the core index is the be-all and end-all for public welfare when the real price of energy has risen. And ignoring total inflation entirely I'm not sure is the right thing to do, if energy prices aren't going to return to a real mean. So I give a little weight to total inflation being higher.

Now, I haven't bought into the comfort zone mantra, at least not yet. [Laughter] And I must say I'm a little bothered by the notion that we're in the high end of the 1 to 2 percent comfort zone when at least three-tenths of that is these nonmarket price increases that grow out of estimations by the BEA. I'm told that our staff can't even replicate their estimating procedure. So quite how much public welfare I want to rest on nonreplicable price calculations,

I'm not sure. I think the market-based PCE is at 1½. We need to think very carefully about what index we might use if we do go to a comfort zone or a target kind of range.

But at this stage of the cycle, given the strength in demand and high-level resource utilization, I'm convinced we should lean hard against any potential increases in inflation. And I'm mindful that, because inflation expectations are anchored, the Phillips curve is flat and it will take a while to see inflationary consequences once they start. I think that, before we stop tightening, we'd want to see a little more evidence that conditions were in place to cool demand.

On the wording of the directive itself, I think that we are moving into a stage at which we'll need a few more words to explain why we're doing what we're doing. For the last couple of years, the focus has been entirely on the balance-of-risk assessment and the fact that we've announced our rate increases and what we're going to do, and people haven't paid much attention to the rationale paragraph. Through this period, policy has been data-dependent to some extent. But, as we have all said in our speeches, we are becoming more data-dependent. And as we become more data-dependent, it behooves us to explain to the public what data we're looking at. As we go forward from here, we'll have to think carefully about how to phrase the rationale paragraph to help the public understand what the most important data are. I expect that importance to change from time to time.

With respect to the specific wording under the revised alternative B, I was glad to see the phrase "appears likely to moderate to a more sustainable pace." I think that captures what nearly everybody around the table was saying yesterday. In terms of productivity gains holding down unit labor costs, I see the inflation process working importantly through the labor market and through labor costs. I agree that compensation should catch up to productivity at some point. But I think we can take a bit of comfort from the relatively modest gains in unit labor costs, even



making the corrections the Chairman did. One possible addition to make it more complete would be to say that “ongoing productivity gains and moderate increases in compensation have held the growth of labor costs in check.” And I agree with the use of “possible increases in resource utilization” because I’m not ready to say that 4.8 or 4.9 is below the NAIRU. I think that remains to be seen.

And I agree with President Pianalto’s concern that the “may” could cause the markets to build in a little more tightening. Still, these are the words that seem to me to describe very accurately what I think we should be about: A little more tightening after today may be needed. We’re not sure, and the markets will just have to do what the markets do. We do have the minutes coming out in a couple weeks, which would clarify that. Sorry to go on so long.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I certainly favor an increase of 25 basis points in the funds rate. And I also think that, given what we think we know from our current information about the state of the economy, it’s highly probable that when we come up to our next meeting we will want another 25 basis points. That’s my view on the basis of the information now available.

I thought the staff discussion of the two-year rate’s reacting relatively little to recent data was quite interesting. I would make the following observation. I think that we have had, actually, very few significant data surprises. And so one reason you don’t get very much is that there hasn’t been a data surprise to which the two-year rate has reacted. I would note that there was a pretty substantial reaction to Hurricane Katrina because, before the hurricane, the market had baked into it an increase of 25 basis points and then that dropped to a probability of 50 percent, if I recall. So there was a reaction to the hurricane, and then, as a consequence of

statements from Chairman Greenspan, particularly, and others, that came back out of the market. So that's not part of the macroeconomic data set that you used in testing this proposition. I think it makes good sense for the market in recent years, and even the last six months, not to be very reactive to current data, given the forward guidance that's in the statement and given what we've been saying, despite the clause in paragraph 5 of the statement.

It seems to me that, given the background of where we are, given that we would like the economy to continue to move on a good path of growth and for inflation to remain restrained, that we should not alter the statement unless we have a very clear purpose in mind right now. The time will come when we will alter the statement. But the market is going to be reading between the lines of anything that we publish. And so, unless we have a clear purpose in mind by changing some of this language, I would not change it to produce something that we regard as synonymous because the market is going to look at that and say, "Well, they are trying to send us some message. If they didn't want to send a different message, why would they be changing the thrust of the language?" So that's why my view is that we are going to need further rate increases.

I would also note that if we were operating with a money growth target in a world with minimal money demand disturbances and all of that, we would anticipate that a strong economy would be driving up interest rates. So if you think that what we're doing with the federal funds target is trying to replicate what you would get under a money growth system that could work under ideal circumstances, we would expect rates to be going up with a strong economy. And that's what I think we have to try to replicate. So, until we are ready to tell the market that we think that we're done, we should do practically nothing in terms of the statement because the market will read something into it that we might not intend.

I also think that, given the history, should we get a large surprise in the employment data or anything else—let's say a large downward surprise—the market would probably focus pretty quickly on that paragraph 5 about the Committee's responding to economic prospects. As long as we don't get any significant surprises, the market is not going to react. And, indeed, we should not want the market to react because, if we continue to get data coming in at or on the high side of expectations, we should be quite pleased that the market is bidding up interest rates because that's exactly where we're probably going to want to go under those circumstances.

Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. I, too, support the ¼ point increase, and I'm persuaded today by the theme I hear repeated that we want to maintain confidence in the Federal Reserve. I was particularly taken with President Stern's statement that his read on the people he's talking to is that the Fed would not allow inflation to get loose.

I wonder about what it would take to contain long-term inflationary expectations. Clearly it is not simply a U.S. phenomenon because the yield curve and inflationary expectations around the world are very similar. It seems to me that, in looking at the Taylor construct, we may be at the upper end, with one more move, of where we want to be in terms of a policy response. It's possible to read in one of the charts that the market is anticipating to some extent that we may actually overshoot and come back. But recognizing the importance of our being diligent with respect to inflation, I think that it's going to be a much tougher decision next time as to whether or not we should raise. Dino's comment about our having a sort of binary decision right now is exactly right. We ought to maintain the statement that we have. My preference

would be to have taken out the sentence regarding further moves, but I think it's the right sentence to leave in at this time.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, this issue of tightening is kind of like Pascal's wager about the existence of God, and our personal gain-loss ratio as central bankers indicates an answer in the affirmative. That is, I do think Vice Chairman Geithner made a very good point about expectations and about the expectations of how we will perform our duties.

Despite the question I asked earlier about row 4, I am in favor of further tightening. I am in favor because I believe that the tightening that we've done, although we don't yet have answers to the question we've asked about lags, doesn't seem to have done much harm in terms of slowing the pace of economic expansion. I would like to build a reserve that we can then subtract from if we need to respond to weakness. And so I am in favor of tightening, and I am in favor of continued tightening because (1) it seems not to be doing great damage to economic growth, which is stout, (2) I'd like to have something to give back when we see weakness, and (3) I'd like to ward off inflation.

I have only one request on the wording, and that is that we insert the word "global" before "resource utilization." [Laughter] Thank you. I never give up.

CHAIRMAN BERNANKE. Had to put that in there. [Laughter] President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I have a slightly different view. I would go with A. I wouldn't dissent over it if I were a voting member, but I would push very hard for signaling that we are just about at the end. And here is a bit of my reasoning. I think we are at or in the area of equilibrium in terms of the fed funds rate. Perhaps we're even at the upper end. I know we can't observe what the equilibrium rate is, but then we can't observe the NAIRU

either, and we tend to put a lot of weight on that. If we believe our projections—the Greenbook or our own projections—I suggest we are moving back toward trend, even without further actions. Then I think we are where we need to be. If we believe the Greenbook that we need to raise the rate and then come back down, then we are about where we need to be.

So I think that's important to keep in mind. Also, probably most in this room have said at one time or another that monetary policy acts with a lag, but we never believe it. And here we are, we've tightened for how long? We recently tightened again. We are at a point at which we say there aren't really inflationary pressures, and yet we have tightened up. The outlook is that we would move to trend, and yet we haven't had the full effects of our recent tightenings. The fourth quarter was weak but for transitory reasons; and the first quarter bump-up was a bounceback for the weak fourth quarter, and we're heading toward trend. I think we are where we need to be, and we need to be patient about that. And about whether we move again—we ought to have our language say that we are not moving but that we may if the data come in stronger than we anticipated and than our own projections suggest they would.

So here we are anxious again about it. The economy is strong. We've heard it's strong. And yet we don't believe that it will taper off, so we've got to do something about it. And that is our history—always going too far. I think that's what we're in danger of. Whether we go to 4¾ percent today is not the issue. The issue is that we are about where we should be, and if we're going to signal something, that's what we should be signaling to the market.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. I'm reasonably comfortable with the stability of inflation and inflation expectations right now. But, frankly, they're a little on the high side for my taste, and I say this with due appreciation of the calculation problems that

Governor Kohn alluded to. The expected CPI and the term spreads are running around 2½ percent. That seems high to me, but I'd be open to persuasion if the staff had information that there was some inherent bias, that we shouldn't take that as the center point estimate of the distribution of the true rate of increase there.

In thinking about the policy decision today, I judge that the public's expectation of our moving once after today and then taking a break, given the current state of the economy and the near-term outlook, is pretty reasonable. But in thinking through the decision we are facing or are going to face in the next couple of months about deciding where to stop, I find myself casting about for ways to gauge what short-term real rates are going to need to be on a sustained basis going forward. If you look back at the late '90s—another period of sustained, fairly balanced growth—two more ¼ point moves are going to put us at the lower end of the real rates we saw back then. And taking that together with a sense that the world economy is strengthening now and inflation is a touch on the high side suggests that further moves beyond 5 percent might be necessary. On the other hand, forward short real rates are remarkably low, and that suggests that price stability might require lower real rates than we otherwise would have thought. We might have to come back down below 5 percent later on, as the market expects. But if I had to bet, I'd bet on the first risk rather than the latter. In any event, I'd be happier moving market expectations in the direction of the lower ultimate expected inflation rate, even if that meant somewhat higher expected short real rates.

I'll repeat something I've said before and then comment on something Don said and something Vince said. I agree with Governor Kohn that, when we do reach a resting point, we should be careful to communicate in such a way that the public doesn't place too much probability on our staying fixed for a long period of time. Vince said that he is finding evidence

that the markets are looking to us rather than to the data, and perhaps it's the case that uncertainty about our intentions is distracting markets from reacting to the incoming data. I just mention this in the context of row 4. The logic of the balance-of-risk assessment is not to express our intentions or express what we're going to do with policy, really, but to sort of ask the public to reverse-engineer things from our signal about what we're going to do with interest rates a couple of months ahead.

It strikes me that, when we get around to reconsidering the statement later this year, it would be useful to step back from that whole logic and think it through on a more fundamental basis. I think it would be preferable for the public to understand our intentions and for reactions to the data to come in on that basis rather than for them to be hanging onto our words about our intentions going forward. But that's something that I'm sure we'll work to clear up over time. So I'm fine with the statement as it is, theorizing and all, and I'm happy with the decision in alternative B.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me just comment on a few things. First of all, I support increasing the federal funds rate another  $\frac{1}{4}$  percentage point today. I think that's consistent with the Greenbook forecast, with which I'm comfortable, and it's clearly what market participants expect. And I don't think this is a time when we want to surprise market participants.

In thinking about policy strategy going forward, I guess what interests me the most, and concerns me the most, is June rather than May. There's a high likelihood, and clearly the markets expect, that we will be moving again in May. But I think it's important that we try to get ourselves some more flexibility and some more wiggle room come June. So I think exactly

what we say and how we say it are going to matter here. Having said that, it's not easy to have a big impact, it seems to me, on what people might expect for June without going further than I feel comfortable in saying that we're about to stop or we will stop after one more increase. I do think that it might help, at least on the margin, to adopt paragraph 5 from alternative A for the reasons that Vincent pointed out. Getting people to focus more on the data and less on what we may think about it would be helpful.

The only other thing I would add is—and I realize I'm in the minority on this—that I'm not altogether comfortable with this constant reference to resource utilization. As you know, I'm not a big fan of the NAIRU concept. I'm not comfortable with the empirical work there, and I take President Fisher's point that in an increasingly global economy we need to be a little careful about thinking too narrowly about this.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. As I said yesterday, the Greenbook baseline captures the broad contours of my expectations—namely, solid growth going forward and projections for inflation moving downward over the forecast period. But that baseline is broadly the same forecast that we received in January, and in January it was supported by a 4.75 percent funds rate. Obviously, this Greenbook has that same outcome being supported by a 5 percent funds rate.

Based on the incoming reports that I received from my District contacts, my guess is that the January forecast was about right. So I do fully support another 25 basis point increase in the fed funds rate today. But then, that leaves open, obviously, as others have said, whether it's going to prove necessary to move to 5 percent or higher and how we communicate that.



As I mentioned yesterday, my impression is that the Greenbook is showing pressures in the labor market, and that was one of the central reasons for moving the fed funds path upward to get the same inflation outlook. Because I'm not seeing those same pressures, I'm inclined to believe that a 25 basis point move today roughly balances the upside and downside forecast risk for inflation. Therefore, I could support leaving this meeting with the presumption that the rate hike today is more than likely the last one for a while.

Now, having said that, I am sensitive to the distinctions between a forecast risk and a policy risk. And although I see the risk to the forecast, particularly the inflation forecast, as relatively balanced at a 4<sup>3</sup>/<sub>4</sub> percent funds rate, I'm not averse to taking out some additional insurance in case there is an upside risk or a surprise on the upside in inflation, because core inflation is currently running at a rate higher than I want to see.

So that leads me to think not so much about this meeting or even the May meeting but, as others have said, about the June meeting. As we discussed earlier, my concern is that having no change in the assessment-of-risk language today is going to reinforce the expectations that there will be another 25 basis point increase in May, and I'm a little concerned that it will also lead to an expectation of an additional 25 basis point increase in June. When my staff looks at the distribution of market expectations based on options on fed funds futures, in the week or so following our last meeting there was a movement up, but not because the data came in unexpectedly high. The data came in where they were expected, but the fed funds options did move up. I'm concerned that we're going to see a similar pattern after this meeting if we don't make some changes to the language. But given Governor Kohn's comments and some of the others, the minutes can help us with that. Our statements can certainly also help us convey that.

Given my concern, though, I have to say that I was interested in the language that was suggested in the Bluebook by Vincent—that we modify our statement in section 4 just slightly to say that some additional firming may be needed. However, given people’s comments today, I can live with keeping section 4 language the same and accept some of the changes that Vincent has laid out in alternative B, but I suggest that we then use our minutes and our statements if we’re starting to see too much movement in market expectations about where we’re going to go. Thank you.

CHAIRMAN BERNANKE. Thank you. First Vice President Stone.

MR. STONE. Thank you, Mr. Chairman. I support a ¼ point increase in the federal funds rate. I think, as we said yesterday, the risks to growth are balanced. Risks to inflation are moderately tilted to the upside, with core inflation near the top of the range that I feel comfortable with. Any positive aggregate demand shock could send inflation higher than we’d like. I think that the Committee is probably close to the end of a tightening cycle, whether it’s 25 basis points or 50 basis points away. In looking at those risks, I think that there is a greater risk to ending hikes at a level that turns out to be too low than the risk of ending at a level that turns out to be a little too high.

I support the language in alternative B. I am a bit concerned about the interpretation that may say that the expectations are for two more increases. I came in today supporting the final language that came out in alternative B after the modifications. I now think it’s important to keep the word “possible” in the language because, if we take that out, people may almost certainly believe that we’re looking at greater concerns about inflation than I think we’ve indicated in our discussion. So it’s important to keep the word “possible” in the discussions, and

I would keep the rest of the language the same. But certainly in the future the phrasing is going to be very important, particularly at the May meeting. Thank you.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Thank you very much, Mr. Chairman. I much appreciated the change in the format of the meeting whereby you summarized the general points of agreement yesterday and gave your own sense of the outlook. I thought that was a helpful change and something that was quite useful to me. I know that, as I sat down early this morning to think about my own policy prescription, given everything we have been looking at and talking about and the discussion yesterday, I was struck by how good the near-term outlook looks. Clearly there are risks to both growth and inflation from a number of different forces. But to borrow Vice Chairman Geithner's language from yesterday, there does seem to be a good probability that the trajectory for the economy is one of an orderly transition. I like that—"orderly transition" from a higher rate of growth to a somewhat slower rate of growth, less potential for price pressures, and continued solid performance.

So I think that that is a fabulous place in which to be. The question I ask myself is how best can policy, both what we do and what we say about it, ensure that outcome or give that outcome the best chance of happening. I find myself a bit between President Hoenig and President Lacker on this—and to some extent President Pianalto, too. I think there is something to recommend about being able to say that we are either ready to stop now after this 25 basis points or we soon will be. The question is how to do it. How to say that, to me, is a difficult problem. President Hoenig made a good point about our forecasts saying that we are going to go up 25 basis points now, another 25 points at the next meeting, and then six months or so later back down another 25. That does

seem to say to me that, over the period in which monetary policy usually works, maybe we will be in about the right place with this 25 basis points.

I am in favor of a 25 basis point move because I do think there are some slight upside risks for inflation in staying at 4½, and it is a matter of risk management—almost like President Pianalto’s concerns about insurance. As a matter of risk management, another small move upward is a good idea. That is encompassed in both alternative B and alternative C. I much prefer B because it does have a more balanced discussion of risks.

Now, what I could clearly see doing is taking four and five in the assessment of risk from alternative A and putting those in alternative B and basically saying to people, “There is a chance that we are where we need to be. We are going to watch the data, and we are not giving you a solid take on what the next meeting will be.” I know there are people who believe that conveying that would provoke too great a market reaction. Maybe that is true, but I still think at some point and some point soon, May perhaps and certainly June, we are going to have to figure out a way to say that we are stopping and we are not giving you future guidance because we don’t know what future guidance to give you. We don’t have any clearer crystal ball than the rest of you do, and frankly, we would like to see what yours is saying rather than simply getting feedback about what you think ours is saying.

So I am in favor of B. I could graft on four and five from A. I take the point that I think some of you would make, some of you have already made, that that might provoke too great a reaction from the market and increase the upside risk to growth and, given where we are in terms of resource utilization, possibly unhinge inflation expectations, although I don’t give that a high probability. But it could produce a bit of market turmoil. Maybe we don’t need it.

I am a little concerned that we are a bit more hostage to the markets' understanding of us than I am really comfortable with. I would rather do what we need to do and let them figure out how to get used to it rather than constantly having to modify what we do based on what they think we are telling them that we are going to do. And I am looking forward to the day when we are a little bit clearer about all of that. For the time being, I can go with B the way it is. I kind of like the language that is the alternative language mentioned in one of the paragraphs in the Bluebook, but it is really hard to get into wordsmithing even early in the morning on the second day of the meeting.

[Laughter]

So I am okay with B. I am not a voting member, but I wouldn't dissent over the language even if I were. But I really do look forward to being able to say, either in May or in June, "We are done. We are going to be looking at the data. You tell us what you think we ought to be doing."

CHAIRMAN BERNANKE. Thank you. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. I, too, favor a 25 basis point increase in our funds rate target today, and with that move and based on discussion that we had yesterday and this morning, I judge that we are close to being balanced. However, even at the point of presumed balance, I remind myself that a negative surprise on inflation would be more worrisome to me than a negative surprise on growth, and that suggests to me that we do want, as best we can judge, to have a slightly restrictive policy stance. I believe we are close to being at that point.

I also share the concerns expressed by Sandy Pianalto in her question and Cathy and Gary in their comments that I wish we could find some words that would be a little less precise in terms of this future guidance because I do think, like others, that we are at a point where it is not terribly helpful to us or to the markets to have them likely build in two more moves after this one. I'm not as sure as others that that is where we want to be. I like Cathy's characterization of being hostage to

market expectations, which we in turn create with our statements if we are not careful. So I do not have a word to suggest, but I wish we could find a way in line 4 to convey something other than two more moves after this one.

I am also less attracted than others to adding a lot more words to the statement for a couple of reasons. First of all, as I listened to the discussion yesterday, I thought that we have some different views around the table in terms of what we are watching and what we think, and I do not know whether it is possible to construct a whole bunch of words that capture the Committee sense. And if it is a Committee statement, I think it is important that it reflect the Committee. I also would observe that if we are going to have a fundamental discussion of the construct of the statement, it might not be helpful to get ourselves to a point where we have added lots and lots and lots of words now and have to back away from that. It would be much easier, it seems to me, to stay as simple and as close to where we have been as possible, with the option of expanding the statement later rather than trying to go back the other way.

I also want to lobby for the little, seemingly harmless cell in line 5 under alternative A. I would like to see those new words substituted for what we used at the last couple of meetings in whatever alternative we come up with. I think that not only would they cause people to focus more sharply on the fact that they need to think with us about the data we're seeing, but that they actually construct a different sense. The words would, I hope, cause people not to whiplash with every single piece of data that comes out but would emphasize that it affects the "economic outlook." I think that's a better way to say that than what we have been saying in the past. So I would make that change in any event. I think that is as much as I want to say. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I think overall we are in a good position at this point with the economy essentially at full employment and growth homing in on potential, which will, I hope, hold unemployment roughly steady. Core inflation is pretty steady although, at least by several measures and particularly the core PCE, it is in the top half of the range that I would like to see. But I agree with Governor Kohn that this is a matter that we should consider. What index, and where it is relative to what we would like, bears further thinking about.

If you take inflation to be in the top half of a comfort range as opposed to the middle, an optimal policy setting would place the funds rate toward the upper end of a neutral range or would be minimally restrictive. I say “minimally” because we are at most a little above the middle of the so-called comfort range and also because the various rules presented in chart 7 of the Bluebook suggest that the appropriate response of policy to a deviation of inflation from the middle of the range is actually quite small.

If inflation were to decline, say, 50 basis points, from 2 percent to 1½ percent, the response, according to most of the rules in the table, of the fed funds rate to that deviation is on the order of 25 or 30 basis points. So it is sort of a one-policy-move difference. At this point, it seems to me, policy is pretty close to appropriately positioned.

In terms of risk assessments, I share Governor Kohn’s concern about the possibility that growth won’t actually slow to a sustainable pace and so the economy may overheat. But I am also concerned about overshooting, in part because the delayed effect of our policy actions may show up especially in the housing sector with greater force than we expect and we are a little uncertain—David mentioned this yesterday—about just what the spillovers might be to consumer spending via balance sheet effects or wealth effects. I think we do need to be sensitive to the possibility of overshooting, and here I would endorse President Hoenig’s comments on that. So I can certainly

support a 25 basis point tightening today coupled with some slight policy inclination for further firming. But I would not like to do anything to boost the market's perceptions of the likely ending point of the cycle. I'm not sure what the best way is to accomplish that. I had first found myself having some preference for using the alternative language suggested for B that would say that some modest additional policy firming may be needed. But I am not sure that is the right way to go.

As I look forward, I share the concern that a number of you have expressed—that as we get to the May meeting we are going to find not only that markets expect us to go another 25 but also that an additional 25 will be priced into the market. And it seems to me that the construction of our statement raises the likelihood that markets are going to continue to build in expectations for moves beyond 5 percent. Let me explain in part what I'm worried about. I am worried about the way in which line 3 of alternative B characterizes our concerns about energy and commodity prices. As I looked at the new Bluebook handout that Vince just gave us, I liked the change that has been made in line 2 where it says that the economic growth has rebounded but in effect then adds, "But look, in our Committee forecast, we wanted to let you know we're expecting really strong numbers for Q1, but we think it is then going to moderate to a more-sustainable pace."

Now, we might have tried to do the same thing in line 3, but unfortunately we didn't. We don't state what our forecast is to give markets a reasonable way to judge incoming data. Let me get a bit more specific about what I mean. Consider the Greenbook forecast for core PCE inflation for the remainder of this year. I'm more optimistic than the Greenbook is, but the Greenbook forecast is that, for the remainder of this year, core PCE inflation is going to come in at 2.2 percent, which is certainly above the top end of the comfort range that I or anyone else who has opined on this has suggested.



So what will the market response be if the Greenbook forecast actually materializes? It seems to me that the Greenbook projects that the uptick would be temporary, so we needn't respond. But the statement in B essentially says, "Look. The run-up in energy prices has had only a modest effect on core inflation." In effect, it says we continue to think that that will be the way the world transpires, and in the end I think it says that we regard it as an upside risk to our forecast that elevated prices of energy and other commodities have the potential to add to inflation pressure. So if, in point of fact, the Greenbook is right and we start seeing 2.2 for core PCE, what will markets conclude? "Yes, this is what they're worried about. They're really worried that an upside risk to their inflation forecast is that inflation is going to come in this high. What are we to conclude other than that this is a negative surprise to the Committee, and therefore they are going to go above 5 percent?" So we have told market participants in line 2, "Don't be surprised if you see a very strong growth number in Q1. We think that's temporary. It's going to abate." What we haven't told markets is the comparable thing, namely, that we may well see a boost in core PCE inflation for the next couple of quarters, but we think it is temporary.

One thing that we could do would be to change the phrasing and say in line 3 that the elevated prices of energy and other commodities may boost core inflation modestly for a time. That would distinguish this from the case of rising inflation due to resource utilization, which we do see as an upside risk to our forecast. But generally whether or not we make this change, I am concerned that we are going to see more increases priced into fed funds futures, and I would cheerfully endorse the kind of move that has been made in this draft of alternative B, in which the Committee's forecast for growth has been clearly enunciated. And moving in that direction for our baseline forecast for inflation would be a useful way to go as well.

If I could just spend one more second, I would like to propose a bit more wordsmithing in alternative B. A principle, or a practice, that I learned at the Council of Economic Advisers that I think would be a good one for us is that you never make a statement that purports to be a statement of fact unless it can be fact-checked. [Laughter] This process is rigorous there. I would say the first statement in line 3—“as yet the run-up in the prices of energy and other commodities has had only a modest effect on core inflation”—is not fact-checkable. I believe that’s the case. I think most of you believe that’s the case. I wouldn’t want to have to fact-check it. I don’t know how you would do it. I would add something like “has apparently had only a modest effect on core inflation.” The point about the fact that productivity gains have held the growth of unit labor costs in check, I don’t personally mind that at all. I agree with that. I simply think that it is not the only thing—arithmetically modest compensation gains have done the same thing. So I do not mind listing it, but I would say “have helped.”

CHAIRMAN BERNANKE. Thank you. It is 11 o’clock. Why don’t we take fifteen minutes for a coffee break?

[Coffee break]

CHAIRMAN BERNANKE. President Moskow, are you ready?

MR. MOSKOW. Yes. Thank you, Mr. Chairman. I favor the 25 basis point increase and the language in alternative B. I do not think this is the time to keep our rates at the current level, and I don’t think it’s the time for us to give a signal that we are about to stop. The likelihood is that we will probably have to go to 5 percent, but we do not know. As we said all along, it is going to depend on the data.

The second point I would make is that this will make fourteen consecutive 25 basis point increases in the fed funds rate. So we have known for a long time, as we have gone down this path,

that when we wanted to stop or we thought we would want to stop we would have to give a signal to the market. And I do not think this is the time to do it now. Maybe in May it will be. Again, it will all depend on the data whether we will want to stop in May, but that is the time that we would give a clear signal to the market.

Now, if the market gets ahead of us, as some have been concerned about here, in the past the Chairman of this Committee has given a signal of some sort between meetings, and we have always had that option. The Chairman always has that option. Some people have raised the question about whether we are hostage to the market. I personally don't feel we are hostage to the market at all. At some point the market will have to live with our decision, and if we are going to do something that is different from what the market expects, so be it. But I certainly do not think that this Committee is being held hostage to the market.

On the statement, I thought Bill Poole's philosophy of minimum changes until we are ready to give a different signal is a very good philosophy, and in that regard I would say two things. First, some people have suggested possibly tweaking number five, and I just do not see the real benefit of doing that. That this may help change some expectations is a very subtle psychological point, and I certainly would not want to go to the bank on that. We are much better off staying the way we are. Now, having said that, I bring up the word "possible," which comes around and bites me in the tail a bit because we did have "possible" in the January FOMC statement. So I'll fold my tent on that. [Laughter] I think we are free to use the word "possible" there in the interest of consistency. Second, on the statement itself: In the earlier version that was circulated to the Committee, some specific data were referred to, and someone made the comment here that it is important for us to explain to the public what data we are thinking about. I forget who said that. But I really agree with Janet's comment, and then Tom sent a note in too, saying that we want to keep the statement as

short as possible and then use the minutes for that purpose. The minutes, again, come out three weeks after the meeting. We have accelerated them. We also use speeches, but certainly the minutes are a perfect vehicle for elaborating on the statement itself. And I think that philosophy is a very good one.

Then I just wanted to say a few words about inflation and Fed credibility. We are all very pleased with the low inflation numbers that we have seen so far, and a number of people have mentioned the importance of Fed credibility and keeping inflation low. As we know, the Greenbook forecast has core inflation going up above 2 percent, and I think we don't know exactly how long it would stay at that. We do not know if it is going to go above 2 percent, and we don't know how long it is going to stay above that level. But I am uncertain myself as to how long it could stay above 2 percent without having an impact on inflationary expectations. This is just something we have to take into account and say we want to be vigilant about. There is a lot of uncertainty here. We just have to keep monitoring it.

In terms of the real economy, the best forecast is that growth will be near potential or higher this year. So I think we definitely want to maintain as much flexibility as possible in our statement now to allow for the possibility that we may want to move even higher than the Greenbook assumptions in the future. Again, it is going to depend on the data, as we have all said, and we just do not know at this point, and I think the language in alternative B gives us this leeway.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. We have a two-hander.

CHAIRMAN BERNANKE. Oh, I'm sorry. President Poole.

MR. POOLE. I don't know whether this is fair or not.

CHAIRMAN BERNANKE. Absolutely.

MR. POOLE. I have a proposal to offer here that makes use of the minutes, as Michael suggests. We make our statement after this meeting with minimal change and then use the minutes to say four things. One, the Committee believes that, after May, accommodation will have been largely removed. Two, policy will be responsive to the data. In the light of that, three, if the economy remains strong and inflation risks remain a concern, some further rate increases may be necessary depending on the data. Four, data indicating that inflation risks are receding would lead most likely to the policy rate remaining unchanged.

If we said that, we could then at the next meeting essentially do away with sentences 4 and 5 in the policy statement. We would have found a way to exit from the forward guidance that has been in the statement. And then along the way, if the data come in suggesting that further policy tightening is appropriate, we use the minutes to indicate why the rate changes, but we have mostly gotten out of the forward guidance. So here is a specific proposal to try to explain this in the minutes with as much clarity as we possibly can.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I'm in support of a 25 basis point increase today. I am favoring alternative B, but I want to make some comments about the wording.

One of the things I am struggling with, in addition to some of the points everybody has made around the table, is the apparent presence of a tremendous amount of liquidity in the markets. I look at how much we have raised rates, but the fact that there is so much out there that the banks are trying to lend and that other markets are trying to invest tells me that there is a lot of liquidity. I think that the liquidity pressures are an inflationary risk, and that is something that will influence my decision about whether or not we need to stop. Because of the amount of liquidity out there, I am not comfortable saying we are there yet.

The second thing I would like to point out is that I like President Guynn's new beard, [laughter] but I also support his recommendation to look more closely at alternative A, line 5. One of the reasons I like A-5 or something along that line is the use of words like "evolution" and "implied by incoming information." Compared with what we now have in line 5, these words give a different tone—that we are looking at a slow-moving set of data coming in, not one piece of data and not one series of data. As in every meeting, I heard around the table today that, given the monthly volatility in all the series we look at, all of us are taking all of these together. We are smoothing through one-month blips, and words that are closer to "evolution" than to "change" give us a better sense that we are looking at the whole tone of information coming in. I would like us to move down that path going forward. I can stick with the wording today, but I think that that kind of approach may make people less dependent on one series of data in one month in the release.

CHAIRMAN BERNANKE. Governor Kroszner.

MR. KROSZNER. Thank you, Mr. Chairman. I also support the 25 basis point increase in the federal funds rate target. Obviously the question that we are dealing with now is not just optimal monetary policy but also optimal information disclosure and optimal communication policy. There are a lot of moving parts right now, a lot of changes, and so for the moment, I would probably favor being leaner rather than fuller in descriptions even if we decided to go forward in the longer run with fuller descriptions, which I think is perfectly reasonable.

As has been described, there are a lot of alternatives—not just the statement but also the minutes. There are speeches, and speeches on communications could be given specifically. There are also background sessions with key players in the journalism community and elsewhere. So I think that something on the order of B or even a slimmed-down B would be most appropriate at the moment. I would not lean toward going to something like A-5 yet. That may provide us with a

very good basis for thinking about what we might want to do next time. So I applaud Vincent and others who helped to create alternative A, in some sense a way to get us thinking about where we might be moving and some of the costs and benefits of doing that. But particularly given that I have heard somewhat different views from Committee members about where they, given current data and current Greenbook projections, would be likely to go, I do not think we want to signal something too clear at the moment.

Also, we have had some discussions about whether or not we can take back 25 basis points. I don't really see the economy as being on such a knife edge that we will know that it's exactly 5 or exactly  $4\frac{3}{4}$  or exactly  $5\frac{1}{4}$ . I think it is highly unlikely that we go to  $5\frac{1}{4}$  and get information that we know that we have gone exactly 25 basis points too much and have to have a retrenchment. It is more likely that the economy would evolve and then we would think that things had really moved in a different direction, and if we were to have to move down the line, it would be more than a 25 basis point move. Historically that has been typical, although not always the case, and has been true both in the United States and elsewhere. So we should not overemphasize that we will get it exactly right and that we will know exactly where we will be. We have to be in a comfort zone not only on inflation but also in terms of where our target rate is. It is useful to think in those kinds of terms about where we will be going and also to realize that retrenchments are unlikely to be the sort that a few months later we take back a little even if that's what the market may be predicting. But I leave that to others who may have much more experience in that; maybe my view is a little naïve.

CHAIRMAN BERNANKE. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. I, too, support the 25 basis point increase in the federal funds rate and would just like to make a couple of points about the market and market expectations.

It does strike me as a particularly inopportune time to miss market expectations. Given the changes in the economy that we have discussed over the last day and a half, particularly a slowdown in housing, potentially some growth in the business side, increased expectations of growth overseas, and, to be candid, the changes here at the Federal Reserve, it strikes me that we should be taking incremental steps both in terms of message changes and in terms of the sorts of statements we have. So this would be, I think, a very successful meeting if everyone yawned at the statement and the market reactions were somewhat boring this afternoon and tomorrow.

An issue was raised about whether we're leading the market or the market is leading us. It strikes me that the markets—and I particularly have in mind traders down on the floor—are looking to us because I think they're also confused, and so they don't know where else to look. This is sort of a safe place for them to cast their eyes and sharpen their pencils. I hope, over the course of the May and June meetings, that they, like us, will be seeing other data points that will give them a clearer crystal ball and that they will be looking both to us and to some other data points to inform their thinking. But right now, I think their sense of things is fairly cloudy. So with that, we have a particularly large burden of presumption in figuring out whether we make changes to what was done in January.

A final point on markets and the ownership of the statement, Mr. Chairman, which you referenced earlier: The typical trader in these markets doesn't fully appreciate what we're voting on and the entirety of this statement, and my own view is that's a little more than would be ideal to be aired in the public forum. For traders to be reading one paragraph and saying, "Oh, that's Chairman Bernanke," and to be reading the other paragraphs and saying, "Well, that's the consensus of the Committee," strikes me as inviting into their debate a little too much interpretation beyond the data



set. So I think our discussion going forward in terms of who owns what would probably best be carried out in the same close confidence that previous discussions here were.

Finally, in keeping with the suggestion that I think President Poole made about our making as few changes as possible to the January statement at present, the only wordsmithing I would offer in alternative B is the first two words of section 3: "as yet." I'm trying to show as much congruence as possible with the January statement, and so when I see key words like "still" in alternative B, I think that's roughly equivalent to "nevertheless." But "as yet" really is borrowed in some ways from alternative C, which suggests to me almost an inevitability. That is, we expect inflation to be coming. "As yet" we don't see it, but it is almost inevitable. And it strikes me that the "as yet" words are potentially market-moving words and that they will perhaps suggest more vigilance regarding inflation, more concern about inflation expectations than we had only a couple of months ago. So the minor suggestion might be to strike the words "as yet" and continue with alternative B as written before us, and that in either regard I firmly support.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I think we really do have a remarkable degree of consensus around the table about the forecast, and you did a very nice job of capturing that consensus. The consensus is really quite close to the Greenbook, closer than it has been perhaps in recent meetings. The Greenbook forecast is conditioned on a monetary policy assumption that has us essentially stopping at 5 with the path pretty flat from 5 on.

The question, of course, for us today is whether we want to alter current market expectations about the path of policy, and I think it is hard to find a compelling case to do so, either from what we discussed around the table or from what the Greenbook provided. The Bluebook provided alternative prisms to look at the implications of past policy. The presumption is that we don't want

to change expectations substantially because we don't see a case for changing the current stance of monetary policy as embodied in those expectations. The question is how best to do it, and I think B is probably the closest we're going to get to that.

I agree with the concern that Sandy began with and which I think Dino echoed—that there is some possibility, maybe even a likelihood, that B is interpreted as raising the probability of not just a move in May but a move beyond May. Again, I don't see any need to do that. I don't think it should be our objective to try to raise the probability around June. The question really is how to avoid that. I do think that adding the sustainable growth reference in the second row and adding “possible,” as Vince explained, helps against that risk, but it probably doesn't take away all of that risk. The problem with doing things that create the risk of pushing down the curve is that people would react to that by saying, “Well, what does that mean about how confident they are about the strength of underlying demand growth?” One consequence of an alternative that would be designed to push down that curve would be, in some sense, questions raised about how confident we are in our forecast about the underlying strength of demand growth, which I don't think that we have a basis for signaling at this point.

Is there some risk we are going to go too far? Of course there is. What are the best tools we have to assess that risk? Again, I think the Greenbook and the Bluebook give us a number of tools to assess that risk; and if the Greenbook forecast, with a monetary policy path close to what's priced in the markets, showed a different trajectory of output growth and a different trajectory of inflation, then there would be more substantial reason for us to be concerned that the path that's roughly priced in now creates too much risk that we would be pushing demand growth below potential over the period. And, again, I think it is hard to say that. It has been said that the output-based policy

rules we use aren't a particularly good reason to be concerned about that because of the way they are constructed.

Are we too hostage to the markets in our current approach? I think that is always something to be worried about. Again, the best check against that risk is to look at the implications of these alternative policy paths for the forecast. I think it's hard to find in the range of paths that the staff has given us significant justification for concern against that risk today.

So I would support moving 25 today; and for the reasons discussed, I think B does a pretty good job of capturing the basic objective of a signal that's fairly neutral to expectations. I'd rather take the risk at the margin that we're pushing it up a bit than the risk that we end up pushing it down.

CHAIRMAN BERNANKE. Thank you. Thank you for this very helpful conversation. It helps inform today's decision and also helps inform how we will be thinking about policy for the next few meetings.

As I discussed, I see the economy as still being basically quite strong, and it needs to moderate to become consistent with its long-run potential. The vehicle by which that is going to happen is the slowing in the housing market. I think we ought to raise the rate today and not to signal an immediate end for several reasons. First, we could think of our policy in terms of the mortgage rate rather than the funds rate. The mortgage rate is currently about the same as it was when we began tightening in June 2004, and it is still providing support to the housing market. If we failed to act today or signaled that we are definitely done, we would create a rally in the long-term bond market and in the mortgage market. We would create, I think, some risk of re-igniting what is currently a cooling market. I think that would be a mistake. Second, I talked, as many of us did, about the small but nevertheless probable risk that inflation will rise slightly in the next few

quarters and the potential costs of that to our credibility and to our future policy need to respond to higher inflation.

So my recommendation to the Committee is that we raise the federal funds rate target 25 basis points today. We are circulating, and you have received, a draft statement that is very close to option B, which I'll discuss in just a moment. What I would like to emphasize is that section 4, which says that policy firming may be needed is in fact a flexible statement, and I think it's entirely possible, depending on the intervening data and the evolution of the economy, that we may choose to signal a halt or even to not move in May. It depends very much on what we see in the housing market, what we see in the economy, and what we see in the inflation data. So I believe this does create significant flexibility.

A couple of other comments. First, I realize that there are arguments on both sides about expanding even modestly the language in the rationale. I think this language is not more explicit or lengthier than the language we have seen in some statements that this Committee has issued in the past few years. It has the benefit in this particular case of slightly moderating the hawkish tone of the statement and of acknowledging that we see, for example, the economy to be returning to a sustainable pace. So I think it does serve some purpose, and I think it is worth including.

I appreciate President Poole's suggestion, but I do not think that the minutes and the statement are perfect substitutes. The statement, after all, is much more timely, and it represents something closer to a consensus or a median view of the Committee as opposed to the minutes, which try to express the range of views and discussion around the table.

One other suggestion about retaining or taking part 5 from statement A. I see the arguments on both sides. But I think the sense around the table is that the change was not sufficient to justify the innovation to the January statement, and so I think we ought to stay with the January language.

If you look at the statement, it is very close to B. We did make a couple of changes suggested by President Yellen, which I think clarify what we are trying to say—in particular, in the middle paragraph: “the prices of energy and other commodities appears to have” (Are the subject and the verb mismatched?)—“the run-up . . . appears to have only a modest effect,” and “productivity gains have helped to hold the growth of unit labor costs in check.” So we are obviously not ruling out other influences that are important.

So that is my proposal—that we move 25 basis points today, that we issue the statement you have before you, and that we watch very carefully the data during the intermeeting period. The Bluebook presented a number of options—types of language that would allow us to pause, to pause with an upward bias, to move and pause, various combinations. So I think we do have quite a bit of flexibility when we come back to meet in May.

We have already had a policy go-round. So I don't want to do that all again, but if there is anyone who particularly would like to comment, here's your chance. Yes, President Moskow.

MR. MOSKOW. I agree with the statement. But just on President Poole's suggestion for putting those four points in the minutes, I want to say that I don't think we should do it. I don't know what the process here would be. I mean, I don't think we should say that the accommodation has been largely removed in the minutes, which will come out three weeks after this meeting and three weeks before the May meeting. I don't see any benefit to it.

CHAIRMAN BERNANKE. It illustrates the difference between the minutes and the statement. The statement is a consensus view or at least a median view. The minutes should express the range of opinion and would include that view but perhaps other views as well. Are there any other comments? Are we ready for a vote?

MS. DANKER. I will read the directive wording from page 25 of the Bluebook. “The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 4¾ percent.”

And now the risk assessment from the statement that was just handed out: “The Committee judges that some further policy firming may be needed to keep the risks to the attainment of both sustainable economic growth and price stability roughly in balance. In any event, the Committee will respond to changes in economic prospects as needed to foster these objectives.”

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

CHAIRMAN BERNANKE. Thank you. We need to take an action. There will be a short break.

[Recess]

CHAIRMAN BERNANKE. All right. We would like to return to the meeting and discuss briefly the format of today’s meeting, and also we need to make a few decisions about what we’re going to do in May. Debbie is going to introduce the discussion.

MS. DANKER.<sup>3</sup> The next item on the agenda calls for us to address the date of the next meeting, which the Chairman has indicated that he wishes to confirm for Wednesday, May 10. More broadly, however, this is an opportunity, while memories

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<sup>3</sup> The materials used by Ms. Danker are appended to this transcript (appendix 3).

are still very fresh, to review the experience of this meeting and to think about possible enhancements to the format of future meetings.

In the past for the FOMC, various formats have been used. Just for example, in terms of the two-day schedule, the FOMC introduced two-day meetings back in 1972 because it felt that it needed additional time every so often to take a longer-term perspective on policy. Thus, during the mid-1970s, when the Committee was meeting about monthly, three or four or as many as five of those meetings each year were two-day affairs. More recently, since 1990, the Committee has consistently held two two-day meetings each year, scheduled to coincide with the Federal Reserve's semiannual report to the Congress.

To help focus your comments about the current meeting, we distributed at the break a list of questions you may wish to address in any comments you may have. Before hearing those comments, though, I want to mention what I think is the baseline assumption about the path forward after today regarding the meeting schedule. First, the Committee will meet for one day next time, just as originally planned, because the timing of international meetings in May makes it difficult to turn that meeting into a two-day one. Of course, if it would be helpful, that May meeting could be scheduled to begin a little early, say 8:30 in the morning, to give you additional time. Then, in June, the Committee already has a two-day meeting scheduled. At that point, having had some more experience with this format, the Committee might be prepared to decide whether to shift most of its remaining 2006 meetings to a two-day format. As Vincent's memo from earlier this month pointed out, your September meeting will have to be confined to one day, again largely because of the international meeting schedule. But the August, the October, and the December meetings could be expanded to an additional day if you wish.

Around the time of the June meeting each year is when we would typically be publishing the tentative schedule for meetings for the following year—for 2007, in this case. But that announcement could always be delayed a little this year to allow for time to decide on the usefulness of the two-day format, and any changes to the 2006 schedule could then be announced at the same time.

CHAIRMAN BERNANKE. We're open for comments on the format or suggestions for the future. President Guynn.

MR. GUYNN. I like what we did—there's a lot to like about the last two days. I think we ought to give ourselves several two-day meetings and see if we can get really comfortable with the notion. I certainly felt more comfortable. I detected comfort around the table. I still found the first go-round a bit tedious. And if we're going to really have time to probe, we need

to find a way to shorten the statement part of that, so we don't lose our focus. The split in the past, trying to cram into one day the economic outlook go-round and the policy discussion was not the right balance. The policy setting is the most important part of what we do, and I really like the notion today that we had a chance to put it all together. So I guess, Mr. Chairman, my bottom line is that I'd like to see us continue to try this two-day format and see if we can't make some of those things even better as we have some experience.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. I'm more or less in agreement with Jack's position here. I thought this meeting went extremely well. The format feels more comfortable, and I think it will get more comfortable as we get more used to it—in particular, the interaction between people, which is a little different from what used to happen and I think is helpful. So I think that, in answer to the first question, the extra time did enhance the discussion and the interaction was good.

I like the separation of the economic and the policy discussions. I liked being asked to formulate my own idea about policy as opposed to reacting to a policy recommendation. That was helpful for me in terms of sorting out my thinking, and I like that opportunity. So I think it's a separation that is worth preserving.

In terms of the time that the meeting takes, if we get into a period of time in which, as has not been unusual in my twelve-year tenure, months go by and you're basically monitoring the data and everything seems to be going pretty well, and you don't need to move policy all that much, and we sort out this whole language stuff, we may find ourselves in a situation that doesn't require the time that the policy discussion required today. So while I'm in favor of the flexibility that you get with the two days, we may find we don't need it. And I hope we get there.



So I'd be willing to be a little more flexible. And I know we've got to put out dates for the following year. I think I'd rather go with something that said maybe there will be three or four two-day meetings, if we have to put out a schedule in June, and see how that works for the next year, rather than make a statement that we're going to do the same thing for some indefinite period of time.

I also think that in terms of a one-day meeting—and we'll definitely have to have one in May and we'll have one in September, and maybe we'll have more than that if policy evens out or the need for policy change isn't as great—I think we could clearly start at 8:30 or even 8:00. We're all up and about. Aside from having a committee meeting or something early in the morning, which I think is a good idea, to the extent we have committee meetings around the Open Market Committee, I think that by starting at 8:00 or 8:30 we can use the morning time more effectively, get more interaction, and extend the day and not bump into the 2:15 time frame. That's all I have to say.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. First of all, I like the format much better—the fact that we have an opportunity to express our opinions on policy before we have to react to you does open the conversation, and it does allow you to not feel that you have to get your policy in during the initial go-round. Now, as to whether it's one day or two days, I'm indifferent. If it works out that we like to have the additional time the day before, I'm fine with that. Or we will find out next time if we can have the different format within one day. That will be fine as well. So I'm most impressed with the different format.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. I agree with everything that Cathy Minehan said. I think she captured the reaction perfectly, that this meeting went very well. This is a point in the cycle when our policy decisions are particularly difficult, but there have been many times when they have been no-brainers. So maintaining some flexibility to have one-day meetings when we don't need the two-day meetings would be ideal.

In terms of starting early, just this morning we had a meeting with Susan on the Basel issues. We had a breakfast upstairs at 7:30, and I think we started at 7:30 and went to 8:30. You could easily just have a breakfast right here at 7:30 for those who want it and start the meeting at 8:00. And the Presidents are all here anyway, so I don't think any of us would mind starting that early in the morning.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Yes, I applaud the meeting format. I think it has gone really well. I think you did a good job as interlocutor. Is that how you say it? [Laughter] I hope in upcoming meetings that we can carve out a little time for understanding our different views about the structure of economic relationships that underlie our policy views. And that would help take the policy discussion deeper than the level of whether you think the yield curve is too hot or too cold.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. I like the format of the meeting for reasons already discussed. I would hate to lose the special topics that we have done twice a year. I think that's what Jeff was referring to. I think they have been very valuable. I'd also point out that there's a practical problem. Many of the boards of directors of Reserve Banks meet the second Thursday of the month, and a Tuesday–Wednesday schedule right ahead of that is not really practical.

Richmond, in particular, has committee meetings at the end of the afternoon on Wednesday. Sometimes we do at the St. Louis Fed as well. So although I think a Tuesday–Wednesday is a better schedule than Monday–Tuesday, it really can't be right up against the meetings of the boards of directors.

CHAIRMAN BERNANKE. President Pianalto.

MS. PIANALTO. I was just going to add that I agree with everyone's statements about the format. I like it. I thought splitting the policy from the economic go-round was very good. I was going to add what Bill just mentioned—special topics—because I think that there are several that we should give more time to. So if we go to a two-day meeting format, there are going to be times when our policy decisions will require more time, but then we can use those other occasions for the special topics. Communications is one. Inflation expectations another. The list is very long.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I also liked the format of this meeting—we really focused on the economics, and then we had more time to talk about policy—and I hope that we stay with that format. But I also agree regarding the special topics issue. Talking about these topics does a lot—especially it gives us background. What the staff led us through last summer regarding housing has been very important as we think about how to deal with housing markets now. So I think that we need to keep those topics because they are the critical elements of policy going forward and talking about them gives us time to think about them way ahead of when we may need to make a decision.

CHAIRMAN BERNANKE. President Yellen.

MS. YELLEN. I would just endorse President Minehan's summary of reactions and the comments that have been made around the table. I think the innovations in this meeting have been

excellent. I think the meeting has run very well. Having more time has certainly enriched the discussion of both the economy and the policy situation. I agree, too, with President Minehan's suggestion that there will be times when we probably do not need two days. I have also been around through some calm times, when there was just not that much to discuss on the policy front, and I think we need some flexibility. Special topics, I completely agree, are very, very worthwhile, and I would not want to see them go. On the practical front, I would endorse President Poole's concern about conflicts with board meetings. You know, for me there would be no way of getting back for Wednesday afternoon. We begin our board meetings on Wednesday afternoon as well. So that's a practical concern.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I would be comfortable deciding now that we are going to do two-day meetings as a matter of course going forward, even though we may not want to fill the time, in part because I think it's important to give us time to do special topics as many of you have said. I would generally be in favor of that. And I think we should figure out how to reconcile our director meetings' calendars with that.

I think the idea of separating the discussion about the outlook from policy is a good thing to do, but it's a little awkward to have these conversations about the forecast without people actually revealing what their conditioning policy assumption is, and it is slightly artificial to separate them completely. So in some sense I think, as the Greenbook does, that we should all take on the obligation in talking about our view of the forecast and the outlook to be a little more explicit about what we think at that stage is the conditioning assumption of the policy. It doesn't always matter a lot, but it probably does matter.

In a two-day meeting, it's probably good to make sure that we have enough time on the first day that everybody has a chance to do an initial statement. I think chopping it up as we were forced to do today is a little suboptimal. It's nicer to give everyone a chance to put their basic views on the table at the beginning, and that may require, as Tom said, that we all be a little more selective in how much we say in that initial round. It is in some ways a better basis for give-and-take once people have been able to make their initial statement.

Compliments to Dave Stockton for the evolution in the Greenbook presentations of alternative scenarios. I think that, as Dave implied, there's probably room for further evolution in how the staff structures its contributions to the meetings. As we think about it and as you pointed out, Mr. Chairman, how we think about evolution in our monetary policy regime and our communications regime, we should give some thought at this stage to what kind of supporting material we want to have to underpin that evolution. I think that's all I've got.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, I applaud the way this meeting has been run. It was the most enjoyable I've had in my long one-year tenure. I do want to weigh in with some sympathy for those that come from the western part of the United States and have to go back for board meetings. Maybe we could front-load these at the beginning of the week and not lag them into Wednesday. That would be appreciated. Second, on special topics, I want to underscore them and also suggest that the Banks themselves have very able research staffs, and we might call on their talents to make some of those presentations. It would, I think, be good for morale, but importantly it would round out viewpoints.

CHAIRMAN BERNANKE. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. Just to comment on two statements, one by President Hoenig and one by President Guynn—I would think we will learn a lot at the next meeting as to whether or not by starting early we could do it in a single day. As the discussion started yesterday, it seemed to me that we were in the old pattern of the work expanding to fit the time available. [Laughter] It seemed to me that the statements got longer, but I did not sense that they were any more substantive than they had been in other years. But I did like the fact that we had divided the discussion, and I like listening to the analysis before I commented on the policy. The presumption has been that we all come in here in a mode to learn. Otherwise we can simply e-mail our result to you. So I liked that division. But I think we will learn a lot at the next meeting.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I, like everyone else, thought this was a very successful meeting, and I liked the format very much. The remark I was going to make is the one that Governor Olson just made, which is I think the May meeting will be a nice test as to whether we can meet President Guynn's plea for concision, and I understand that includes present company. [Laughter]

MR. GUYNN. That was not what I was trying to say. [Laughter]

MR. KOHN. I would like to comment on one part that others haven't commented on, and that is the formulation of the statement and the input of the statement. I liked the idea that you and Vincent were able to work overnight to change the statement slightly to reflect the consensus around the table. I think the statement reflects the meeting better than it would have if it were locked in concrete before we started. And I liked the fact that it can be changed at the meeting by the consensus of the meeting. But, also, people were appropriately, I think, restrained in their desires to make big changes in the statement, partly laying down markers for future statements, and that's

fine, too. So there's a nice balance between making changes and recognizing that we can't rewrite it at the table. But we can make it reflect the meeting a little better, particularly with the interval between the economics and the policy discussions.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Just a couple of comments. I thought the format for this meeting was excellent, and it all went quite well. I would have a bias going forward toward two-day meetings. Yes, there will be lots of times when the immediate policy decision is straightforward and we won't have to spend a lot of time on it. But I think we will have more than enough topics that we are going to want to get into in some depth for quite some time, especially if we start giving serious thought to things like inflation targeting and what we want our statements to say or not say, and so on and so forth. So I would start with that.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. I would just like to insert a comment. This wouldn't necessarily have to be the way we did special topics, but special topics in the past were announced in January and worked on for four months. We received a ton of paper and stuff before the meeting. I think it would be hard to work in a special topic if the meeting weren't going to take up the whole time. So we might have to think a little and set out the two-day meetings. Either that or go always to a two-day format, recognizing that some of the time we wouldn't use it. I think there's some slipperiness there that needs to be thought about more clearly because you just cannot insert a special topic on the run—it takes work.

CHAIRMAN BERNANKE. Well, thank you for these comments. Our next meeting is perforce one day. I would move that we start at 8:30. So we will begin at 8:30 the next time. Nevertheless, given today's meeting, people are going to have to be conscious of time and try to be

as concise and direct as possible in your comments. I agree with Vice Chairman Geithner that we should probably have the experience of the one-day meeting, and perhaps even as soon as next time we can think about whether you'd like to make a change in the calendar. Let's be prepared to do that.

Clearly, one option in terms of flexibility that President Minehan and others asked for is to have the possibility of a special topic at a two-day meeting when the business doesn't seem likely to fill the whole meeting. I think that rather than preparing six months in advance, we could no doubt have some topics that are prepared on a shorter time frame. They would be less intensive. They could be joined by the Reserve Banks as well as by the Board. So that's certainly one option for us to think about if we want to go to a two-day meeting more often, not necessarily every time. But this has all been very helpful.

Do we have any other business? So, we will meet at one o'clock for lunch to honor President Santomero, and the meeting is adjourned. Thank you very much.

END OF MEETING