

**Meeting of the Federal Open Market Committee  
December 12, 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 8:30 a.m. on Tuesday, December 12, 2006. Those present were the following:

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

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

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

Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta

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, Weinberg, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

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

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

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

Mr. Dale, Senior Adviser, Division of Monetary Affairs, Board of Governors

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

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

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

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

Mr. Rasdall, First Vice President, Federal Reserve Bank of Kansas City

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

Mr. Hakkio, Mses. Mester and Perelmuter, Messrs. Rasche, Rolnick, and Williams, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, New York, St. Louis, Minneapolis, and San Francisco, respectively

Messrs. Kahn and Sullivan, Vice Presidents, Federal Reserve Banks of New York and Chicago, respectively

Mr. Olivei, Senior Economist, Federal Reserve Bank of Boston

**Transcript of the Federal Open Market Committee Meeting on  
December 12, 2006**

CHAIRMAN BERNANKE. Good morning, everybody. Pat Barron is sitting in again today for the Atlanta seat. I just wanted to mention that we're going to have an informal luncheon for Jack Guynn following the meeting. Jack wanted to keep it informal, so we're just going to do it right here.

MS. MINEHAN. There will, however, be some comments from the Conference of Presidents. [Laughter]

CHAIRMAN BERNANKE. And some commentary from the Chairman as well. [Laughter] Speaking of retirements, Dino Kos...

MR. KOS. I'm not retiring, though. [Laughter]

CHAIRMAN BERNANKE. This is Dino's last FOMC meeting, however. He has attended fifty-eight meetings, forty-seven of which came since he was appointed the Manager of the Desk and the System Open Market Account. We owe you a great debt of gratitude for your professionalism, for your leadership, and for the very insightful market reports you've given us to start off every meeting for about the past six years. So, Dino, thank you very much. [Applause]

MR. KOS. Thank you.

CHAIRMAN BERNANKE. This report had better be good. [Laughter] I guess I should add that we'll have to have a notation vote to ratify Dino's successor sometime before the next meeting. Dino, the floor is yours.

MR. KOS.<sup>1</sup> Thank you very much, Mr. Chairman. Thank you for those words. The most striking aspect of the intermeeting period was the conviction that markets developed about a benign 2007 outlook both for the economy and for monetary policy. Until Friday's employment report, most of the incoming data were viewed as

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

being weaker than expected. This encouraged market participants to price in lower policy rates for the first half of 2007.

If you would turn to the handout, the top panel on page 1 graphs the Eurodollar futures strip out to 2010 as of the last FOMC meeting, in blue, and as of last Friday, in red. Near-term contracts declined less than 20 basis points, whereas longer-term contracts fell more than 30 basis points. Until Friday's employment report, future short-term rates were even lower, as the markets had come to expect that the weaker housing, auto, and manufacturing data would persist and lead to a first-quarter easing of policy by the Committee. Interestingly, the markets shrugged off the Chairman's speech on November 28 and other comments by Committee members that focused more on inflation risks. Indeed, in this period the markets were focused more on data—especially data that seemed to validate a view that the economy was slowing—than on speeches.

Longer-term yields also declined. The middle panel graphs the target fed funds rate, the green line, and two-year and ten-year Treasury yields since January 2006. Both two-year and ten-year Treasury yields tracked the upward path of the target fed funds rate but began to fall almost to the day that the target peaked. Ten-year yields have fallen another  $\frac{1}{4}$  percent since the last meeting and are now about 75 basis points below the target fed funds rate. This is the largest inversion of this spread since February 2001, when that easing cycle began. As shown in the bottom panel, breakeven inflation rates are little changed and, if anything, have tended to rise at shorter tenures. Most of the decline in nominal rates was mirrored by a fall in real rates as market participants factored in lower activity in the period ahead.

Despite reminders in Committee members' speeches about upside inflation risks, market participants increasingly focused on the probability that policy would be eased in the months ahead. This can be seen in the top panel on page 2, which graphs the calendar spread between the March 2008 and the March 2007 Eurodollar futures contracts. Back in May these two contracts were on top of each other, but then they gradually inverted, implying that rates were expected to be lower in March 2008 than in March 2007. Market participants anecdotally refer to past episodes when the Committee has eased policy several months after its last tightening as weakness in output began to show through. Two episodes are frequently cited: late 2000 and early 1995. The middle panel graphs the calendar spread between the March 2002 and March 2001 contracts. That relationship began to invert about five months after the last tightening, in May 2000. The negative inversion peaked at about 50 basis points in late 2000, and the Committee eased policy in early 2001—the first of a long series of cuts. The mid-1990s episode is somewhat different in that the yield curve and Eurodollar calendar spreads flattened but never convincingly inverted, as shown in the bottom panel. Five months after the last tightening in February 1995 came an ease in July. In short, at least as measured by futures spreads, the expectation for an upcoming ease appears to be even stronger than in the previous two episodes.

Equity markets have been undaunted by the signs of weakness that the bond market is responding to. As shown in the two top panels on page 3, the major equity indexes have had strong rallies since midyear. The prospect of lower interest rates has trumped the possible slowdown in earnings growth that might emanate from a weaker economy. Indeed even a weaker dollar has not dented confidence of either equity or fixed-income investors. If anything, a gradually falling dollar is seen as a positive for large internationally oriented stocks such as those in the Dow or S&P indexes.

After being confined to a narrow range, the dollar depreciated rapidly against most major currencies in late November and early December. As shown in the middle left panel, the euro rose above \$1.32 while sterling looked poised to threaten the \$2 level before consolidating near \$1.96. Sterling is at its highest value versus the dollar in more than fourteen years. The dollar's movements against the yen have been more range-bound as capital flows out of Japan have limited the yen's appreciation. The recent lurch in the dollar reflects improved sentiment toward European economies. It also followed some comments by a Chinese official around Thanksgiving that were interpreted as conveying worries about continued accumulation of dollars among Asian central banks. Reports of diversification by other central banks have fed this rumor mill. Yesterday a prominent former member of this Committee weighed in by suggesting that the dollar had further to go on the downside and that central banks should not concentrate their reserves in one currency. Surveys of investors and speculative traders suggest that short dollar positions are at something of an extreme by historical standards. Such negative sentiment is also borne out by risk reversals, as shown in the bottom right, which show that dollar puts are consistently bid relative to dollar calls and have become more so recently. Of course, once sentiment gets extreme, the market becomes susceptible to sharp setbacks. Indeed, exactly two years ago, the euro appreciated dramatically into year-end peaking at \$1.36, only to have all those gains fully reversed in the early months of 2005.

As shown on page 4, volatilities continue to trade at very low levels. The top panel graphs the one-month implied volatility for the two major dollar currency pairs. Since April/May, volatilities have fallen to new lows. Similarly, in the middle panel, the VIX (Chicago Board Options Exchange Volatility Index) has fallen back to levels last seen a decade ago. In the Treasury markets, implied volatility is at or below levels seen in the summer of 1998. With volatilities low and expectations of a benign environment persisting, dealers continue to report interest in carry trades and sales of structured products with embedded options.

One symptom of the benign financial environment that analysts point to is the higher level of mergers and acquisitions activity in general and leveraged buyouts in particular. The top panel on page 5 graphs the rise of LBOs since their nadir in 1992. The middle panel deconstructs the high-yield bond market according to how the proceeds were used. The red bar—representing proceeds being used to finance M&A and LBOs—has been rising in the past three years. Also rising has been the value of

bonds rated CCC or less at the time of issuance. In short, the market has been more than willing to finance lower-rated paper for purposes other than traditional investment in plant and equipment. It is fair to say that risks are rising.

But the development graphed in the bottom panel is in some ways more interesting. This is the rise of the so-called leveraged-loan market, which exceeds amounts raised in the high-yield bond market, represented by the yellow line. As shown by the blue bars, the portion of such loans originated by or syndicated to nonbank investors such as pension funds or hedge funds has risen and now exceeds the amount taken down by the banks. Private equity sponsors are increasingly turning to this source of funding to finance acquisitions.

Meanwhile private equity deals are also evolving. The size has obviously grown, but two other aspects are worth noting. First, many deals no longer involve acquisitions of underperforming companies. In many cases the acquired companies are performing reasonably well but are viewed as being able to operate with higher levels of debt. It's not clear what value added the private equity buyer is providing in such cases. Second, LBOs are no longer being done solely in industries with predictable cash flows. Several deals were recently announced in volatile businesses such as semiconductors. The poster child for such deals is Freescale Semiconductor. The company was just acquired for \$17.6 billion. Cash flow barely covers interest payments, and the margin for error is very small for a company in a notoriously volatile industry. Cynics argue that tomorrow's nonperforming loans are being originated as we speak.

Mr. Chairman, I am happy to say, once again, that there were no foreign operations in the period. I will need a vote to approve domestic operations.

CHAIRMAN BERNANKE. Thank you. Dino, some work here at the Board suggests that a good portion of the decline in the long-term rates in the intermeeting period was due to a falling term premium as opposed to expectations of inflation. Is that consistent with what you've seen?

MR. KOS. Yes, I think that's correct.

CHAIRMAN BERNANKE. And the reason for a lower term premium?

MR. KOS. If I could answer that question, I'd be rich by now. [Laughter] It's hard to know. I don't pretend that I can give you a precise answer. Certainly, the markets have been in this benign situation for some time, and we've been struggling with this question for several

years—why the term premium has been so low, why spreads have been so low, and why volatilities have been so low for this extended period. I just think that the longer the situation persists, the longer the risks rise—or at least that’s what the worry is. But you all know that.

CHAIRMAN BERNANKE. Are there other questions? President Fisher.

MR. FISHER. Dino, you mentioned last year’s rise in the euro—the soft dollar against the euro and other currencies. Is there a December effect, and if there is, what causes it?

MR. KOS. That’s a great question. It has been asserted, without proof, that some of the major central banks moved into euros very aggressively in December 2004. I don’t know whether that’s true, but there is some evidence to suggest that it might have been the case and that in somewhat thinner markets it had a pronounced effect in December, which then got reversed in the following January or February. It is hard to know exactly why that would have happened. If dealers see those flows, you will tend to get speculators who will follow it or try to front run it. I can’t say whether that’s happening now, though.

MR. FISHER. Thank you.

CHAIRMAN BERNANKE. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. Dino, regarding the last graph you showed, leveraged-loan growth, especially in the share held outside banks, has been happening even though, as you show, high-yield bond issuance really has been running in a fairly normal range. What is making these loan deals so much more attractive to investors?

MR. KOS. The cynic in me would say that a lot of money has been allocated into the credit space. A lot of money has gone into things like credit-default and credit-derivative products. Investors want exposure to credit to enhance yield. They are getting that exposure more and more through derivatives. You need supply to feed those structures, and so, as it were,

demand to some degree is creating the supply. That's one version of events. A second version is that the covenants are easier to negotiate and somewhat easier in general or less stringent than what you might get in the bond market. Third, it might just be cheaper to go out and structure these types of borrowings with a small group of lenders as opposed to going out and actually marketing a bond issue.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Would a natural interpretation be that the growth in the credit-derivative market in the past few years has made credit exposures via banks' loan sales to other entities more liquid relative to the liquidity that has always been there in the high-yield area?

MR. KOS. I think that's probably another factor, which would not be mutually exclusive with the other explanations. It would just be yet another one.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. I move approval of the Manager's report and operations. [Laughter]

CHAIRMAN BERNANKE. Is there any discussion? Are there any other questions for Dino. Can I get a second?

MR. KOHN. Second.

CHAIRMAN BERNANKE. All in favor? [Chorus of ayes.] Thank you. Again, Dino, thank you for your many contributions. We turn now to the staff report on the economic situation. Dave?

MR. STOCKTON. Thank you, Mr. Chairman. As I worked my way through a final reading of the Greenbook this weekend, I was reminded of the old joke about the man who is told by his doctor that he has only six months to live. The doctor recommends that the man marry an economist and move to North Dakota. The man asks whether this will really help him live any longer than six months. The doctor says, "No, but it sure will feel a lot longer." [Laughter] Part 1 of the Greenbook was its usual twenty pages, but with lengthy discussions of motor vehicle mismeasurements, PPI inventory deflator anomalies, income revisions, and footnotes



on errors in Okun's law, it sure read as though it were a lot longer than twenty pages. So, in the kinder spirit of the season, I thought that I would jump straight to the bottom line of this forecast.

The bottom line is that our outlook for economic activity has not really changed much from the one presented in the October Greenbook—or for that matter, the September Greenbook. The economy still appears to us to have entered a period of below-trend growth that will eventually relieve some of the pressures on resource utilization that we believe have developed over the past few years. As in our previous forecast, the current and expected weakness in aggregate activity is being led by a steep contraction in homebuilding. Indeed, the recent readings on housing starts and building permits were a little softer than we had been forecasting, and we have marked down our forecast of residential investment a bit further. We currently estimate that the drop in residential investment is taking about 1¼ percentage points off the annualized growth of real GDP in the second half of this year, and we are expecting a similar-sized subtraction from growth in the first quarter of next year.

We were also surprised to the downside by the October reading on construction put in place in the nonresidential sector. As you may recall, we had been expecting some slowing to become apparent by early next year as a deceleration of business sales, smaller employment increases, and less-rapid growth of equipment spending reduced businesses' needs for space. Moreover, while fundamentals have improved in commercial real estate markets in recent years, they are best characterized as only moderately favorable; vacancy rates for office and industrial buildings are still elevated by historical standards, and rental income has been rising at only a tepid rate. All told, we have interpreted the softer readings of the past couple of months as suggesting that the slowdown in nonresidential construction has arrived a bit sooner than expected, but we don't see an outright slump as the most likely outcome in this sector.

Business spending on equipment has unfolded pretty much as we had expected. The report on durable goods orders was widely read by others as surprisingly weak. In part, that weakness resulted from a 25 percent drop in orders and shipments of computers that we are extremely skeptical about and that the BEA will significantly downweight in estimating investment spending. Among the pieces that actually matter for gauging capital outlays, the report was close to our forecast. We have been expecting some slowing in real spending for equipment and software in the current quarter, and it looks as though that is what we are getting. But with order backlogs still ample, corporate balance sheets flush with cash, and the cost of capital low, we continue to anticipate modest gains in equipment spending in the near term.

Meanwhile, the consumer appears to be chugging along. Our forecast for 3 percent growth in real consumer spending in the current quarter is unchanged from the October Greenbook and close to the average pace of the past few years. Steady gains in employment and income, the drop in energy prices that has occurred since

the summer, and higher stock prices appear, at least to date, to have offset any restraint coming from higher borrowing costs and decelerating house prices.

We have had a few upside surprises as well. In particular, government spending, at both the federal and the state and local levels, has been somewhat stronger in the second half than anticipated in our October forecast. Also, as Steve will be discussing shortly, net exports are expected to make a slightly larger contribution to current-quarter growth of real GDP.

On net, we read these data as suggesting that growth in aggregate output in the second half of this year has been slightly weaker than in our previous projection, largely on account of the softer construction figures. That's not easy to see in our top-line forecast of real GDP because of some serious problems with the BEA's measurement of motor vehicle output. As you know, we simply don't believe the BEA's estimate that motor vehicle output added  $\frac{3}{4}$  percentage point to the growth of real GDP in the third quarter, in light of the fact that vehicle assemblies fell 600,000 units at an annual rate. By our estimates, the BEA's faulty methodology caused the growth of real GDP to be overstated about 1 percentage point in the third quarter. We expect that the unwinding of some of that glitch in the fourth quarter will trim real GDP growth about  $\frac{1}{2}$  percentage point. So, we believe that, on net, the published growth of real GDP will be overstated about  $\frac{1}{4}$  percentage point in the second half of this year. Adjusting for the measurement problems, we estimate that real GDP probably rose at an annual rate of  $1\frac{1}{2}$  percent in the second half, about  $\frac{1}{4}$  percentage point less than in our previous forecast and noticeably below our estimate of the growth of potential.

Our view that there has been a perceptible slowing in the pace of activity has received some independent support from our measures of industrial production. Factory output increased at an annual rate of about 5 percent over the first half of the year but seems likely to increase at roughly half that pace in the second half. The cutbacks in auto production and construction, in addition to their direct effects on aggregate output, are leaving an imprint on the production in upstream industries. Even beyond these two areas, industrial activity appears to have weakened some of late.

The recent slowing in IP has occurred amid signs of some backup of inventories. Whereas a few months ago any problems seemed to be confined largely to the motor vehicle sector, there are now more widespread signs of unwanted inventory accumulation—most notably for steel, fabricated metals, mineral products, wood, paper, and plastics. The impression left by the hard data is reinforced by purchasing managers, more of whom report that their customers' inventories are too high than was the case a few months ago. Our forecast envisions that a relatively brief period of soft manufacturing output will be sufficient to clean up these problems. But we will need to monitor this area closely in coming months because what appears relatively benign today could turn worrisome in a hurry. For now, we are reasonably comfortable that the data on both spending and production are more consistent with

aggregate activity running modestly below the pace of its potential than with a more serious slowdown.

Moreover, it would be a mistake to focus only on the downside risks because there are some prominent upside risks to our forecast as well. To my mind, the performance of the labor market continues to provide the clearest challenge to our view that the growth of activity has slipped below its potential. To be sure, last Friday's labor market report came in very close to the projection in the December Greenbook. But the last two labor market reports taken together were stronger than we were expecting back in October. Payroll employment gains have slowed from the more rapid rate seen over the past few years, but only to a pace consistent with something close to trend growth in output—not the below-trend pace that we estimate has prevailed over the second half of this year. Moreover, the unemployment rate has declined about  $\frac{1}{4}$  percentage point in recent months, an outcome more consistent with above-trend growth than with below-trend growth.

Our forecast assumes that signs of greater weakness in labor demand will become more apparent in the months immediately ahead, with increases in private payrolls slowing to about 75,000 per month in the first quarter and the unemployment rate returning to  $4\frac{3}{4}$  percent. The recent modest backup in initial claims gives some support to this expectation. But slowing in labor demand is, for now, just a forecast.

We considered another possible interpretation of recent labor market developments, which is that, despite the downward adjustments that we have made to our estimates of the growth of structural productivity and potential output, we remain too optimistic in our outlook. The unemployment rate has been moving lower despite growth in real GDP that we estimate to have been below 2 percent. We have been surprised again by the weakness in labor productivity. We have not bought into this interpretation largely because the tensions between the labor market signals and GDP are relatively recent and are not especially large. So we are inclined to gather a bit more evidence before making any further adjustments to the supply side of our forecast. But the recent readings do point to a bit more downside risk than upside risk to our estimates of structural labor productivity and potential output.

Moving beyond near-term developments, we continue to expect that the period of below-trend growth will extend through the middle of next year. As in our previous forecast, the weakness in activity is led by large ongoing declines in residential investment. Moreover, we are expecting the deceleration in home prices to weigh on the growth of consumption next year through the typical wealth channel. With final sales and output slowing, the usual accelerator effects put some brakes on outlays for consumer durables and business investment spending. Those influences are reinforced in this forecast by a modest backing up of long-term interest rates, as financial market participants come to realize that monetary policy will not be eased on the timetable that they currently envision.

We see forces at work that, by the middle of next year, should result in a gradual reacceleration of activity back to a pace in line with the growth of the economy's potential. Importantly, we are expecting some lessening of the contraction in residential investment. Housing starts have now fallen by enough that, if home sales stabilize at something around their recent pace—and I recognize that this is a big if—homebuilders will be able to make substantial headway in clearing the backlog of unsold homes. As they do, we expect construction activity to level off in the second half of 2007 and then to stage a mild upturn in 2008. Another factor working in the direction of some acceleration in activity is a diminishing drag on spending and activity from the earlier run-up in oil prices. By our estimates, the rise in oil prices has held down growth in real GDP by about  $\frac{3}{4}$  percentage point this year but should be a roughly neutral factor for growth in 2007 and 2008.

On balance, our forecast is identical to that in the October Greenbook, with the growth of real GDP projected to be  $2\frac{1}{4}$  percent in 2007 and  $2\frac{1}{2}$  percent in 2008. There were, however, a few modest offsetting influences. A stronger stock market and a lower foreign exchange value of the dollar would, all else being equal, have resulted in a somewhat stronger projection for real activity. But those effects were counterbalanced by the substantial downward revisions that the BEA made to its estimates of labor compensation in the second and third quarters. As you know, we had been expecting about half of the first-quarter surge in labor compensation to be reversed in subsequent quarters. But in the event, it was completely reversed, leaving the level of real income about \$60 billion below our previous forecast. In response, we lowered our consumption projection, just as we had raised it earlier when income had been revised up. On balance, the effects of the lower income offset the influences of a stronger stock market and lower dollar, and our GDP projection was left unchanged.

Like our forecast for real activity, our forecast for inflation also has changed little over the past seven weeks. As we had anticipated, this autumn's drop in consumer energy prices has resulted in outright declines in headline consumer prices. Core consumer prices came in close to expectations as well—though the core CPI was bit below our forecast and the core PCE a bit above. I wouldn't make much of either surprise. Our miss on the CPI was concentrated in apparel, used cars, and lodging away from home—all components characterized by low signal-to-noise ratios. Core PCE came in only a couple of basis points above our forecast, with the surprise here mostly in the nonmarket component of medical care costs, specifically the BEA's estimate of Medicare hospital reimbursement rates—all in all, pretty small potatoes.

Our longer-term outlook for inflation also remains unchanged. The slightly tighter labor market incorporated in this projection, along with the lower dollar and higher attendant import prices, would have led us to mark up a bit our inflation projection. But the downward revision to labor compensation implies smaller gains in labor costs and a noticeably higher level of the price markup, suggesting a little less prospective upward pressure on prices. As in our past forecasts, we expect a gradual slowing in core consumer prices over the next two years as the pass-through

of higher prices for energy and other commodities runs its course and as the current tightness in labor and product markets diminishes and a small gap in resource utilization eventually opens up. Both the CPI and PCE measures of core prices are currently running a bit below the pace of this past spring—by enough to encourage us in our view that core inflation is more likely to fall than to rise over the next two years but not by nearly enough to cinch the case for our position.

I have so much more to say, but I'd better stop here, or you will think that we've begun our honeymoon together in North Dakota. Steve Kamin will continue our presentation.

MR. KAMIN. A few months ago, when Karen Johnson asked me to fill in for her at the December FOMC meeting, I immediately wrote to Santa Claus and asked, as my present, for some major international event to take place, be it an emerging-market crisis, skyrocketing commodity prices, or a spectacular collapse of the dollar. Such developments are not always welcomed by financial market participants or by ordinary working people, but they certainly make for interesting conversation. [Laughter] Well, if you believe what you read in the financial press, Santa granted me my third wish: As Dino has discussed, since you last met, the dollar is down about 5 percent against the euro and 4½ percent against sterling. Two weeks ago, *The Economist* saw fit to put on its cover a picture of a dollar bill with George Washington's jaw dropping.

To put these recent developments in perspective, however, the dollar declined considerably less against the currencies of most of our other major trading partners, and the broad dollar has fallen only about 2 percent over the intermeeting period. This is still a significant decline for so short a period, but is only half the size of the drop posted between the March and May FOMC meetings earlier this year. Also, we have seen nothing to indicate that a major rebalancing of investor portfolios away from the greenback is imminent. Accordingly, as is our practice, in our forecast we have adjusted down the starting point for the projected path of the dollar but continue to project only a modest decline in its real value going forward.

Even before the dollar's recent decline, we were seeing some limited evidence of improvement in the U.S. external balance. A few weeks after your October meeting, we received data indicating that the monthly nominal trade deficit had shrunk from a record \$69 billion in August to \$64 billion in September. Although this downshift principally reflected declines in the price of imported oil, the trade deficit had been boosted by rising oil prices earlier this year, and their subsequent fall and stabilization at least should diminish one factor widening the deficit going forward. This morning, October trade data were released; they indicate that the trade deficit shrank a bit further, to about \$59 billion. This deficit was even smaller than we'd anticipated, with exports a bit stronger and imports a bit weaker.

The recent performance of real net exports also appears a little more positive. The September trade data and other recent information point to somewhat weaker-

than-expected real import growth in the third quarter and nearly flat real imports in the current quarter; this flattening is due in part to a sharp decline in the volume of oil imports as domestic users work off an unusually high level of inventories. With real exports estimated to have continued expanding solidly, the December Greenbook shows real net exports in the third and fourth quarters combined adding slightly to U.S. GDP growth in comparison with the slight drag we wrote down in October. This morning's October trade release suggests that we'll probably revise that contribution up a little further.

Over the next two years, real import growth should pick up as U.S. activity accelerates and oil imports stabilize. With export growth holding steady, supported by the ongoing expansion abroad and the declining dollar, real net exports start deteriorating again and subtract about 0.1 percentage point from GDP growth in 2007 and 0.25 percentage point in 2008. This drag is quite small, however, compared with the nearly 0.5 percentage point drag exerted by net exports on average from 2000 through 2006. It is also about 0.1 percentage point smaller than in the October Greenbook, and we would attribute this principally to the weaker dollar.

Consistent with the improved performance of net exports, the weaker dollar has also led us to project slightly stronger trade and current account balances. The current account deficit now expands just a touch, from about  $6\frac{3}{4}$  percent of GDP at present to 7 percent by the end of 2008, whereas the trade deficit remains about flat as a share of GDP—at around  $5\frac{1}{2}$  percent—over the forecast period. Does this flattening out suggest that sustainability of the U.S. external balance is just around the corner? Absolutely not! [Laughter] The trade deficit is still projected to widen a bit in nominal, dollar-value terms. As long as the trade balance remains substantially in deficit, borrowing to finance that deficit ultimately will lead to growing external debt, rising payments on that debt, and ever-larger current account deficits. Our projection has the net international investment position, which was negative 21 percent of GDP in 2005, sliding to negative 36 percent of GDP by 2008.

The slower deterioration of U.S. external balances that we anticipate depends on continued solid economic growth among our trading partners. Our trade-weighted aggregate of foreign real GDP growth clocked in at about  $4\frac{1}{2}$  percent in the first half of this year, which likely was a little faster than its trend rate. The data we've received since the October Greenbook reinforce our view that a stepdown is in train, with growth in China, Mexico, Japan, and the euro area all slowing in the third quarter from previous unusually elevated rates. We estimate that, all told, the foreign economy decelerated to a pace of  $3\frac{1}{4}$  percent in the second half of this year, and we see it staying at this more sustainable rate going forward.

Can foreign growth remain this strong, even as U.S. GDP growth is projected to average less than  $2\frac{1}{2}$  percent over the forecast period? U.S. growth and foreign growth are highly correlated, reflecting both direct trade links and indirect links through financial markets and confidence effects. However, growth rates here and abroad do not move in lockstep. Over the past thirty years, gaps in excess of 2 to

3 percentage points have periodically opened up between U.S. and foreign growth; at about 1 percentage point, the growth differential we are projecting is not unusual. Of course, were the United States to fall into recession, this would likely be bad news for our trading partners. Since 1970, five recessions have been dated for the U.S. economy, and on all those occasions foreign growth slumped as well.

As we put together our outlook, we also had to consider whether it would take a sharper slowdown than we are projecting to prevent widespread inflationary pressures. We are heartened to see that, as in the United States, the decline in oil prices since August has led to sharp declines in headline CPI inflation in many of our trading partners. For example, euro-area twelve-month inflation has fallen through the ECB's 2 percent target ceiling to only 1.8 percent, while Canadian inflation has fallen to 1 percent.

However, inflation abroad should pick up again with projected increases in oil prices. Moreover, resource utilization abroad has been rising, and it is difficult to identify much slack in the major foreign economies. To date, measures of core inflation and wage growth are not signaling significant upward pressures, but unemployment rates are generally near lows last reached at the end of the 1990s. The emergence of more-pronounced inflationary pressures, should that occur, would likely trigger a more substantial further tightening of monetary policy and financial conditions than we are currently anticipating, leading to a falloff from the steady foreign growth called for in the Greenbook forecast. This, in turn, could put the U.S. trade and current account balances on a more negative trajectory than we now expect. That concludes my remarks.

CHAIRMAN BERNANKE. Thank you. Are there questions for our colleagues?

President Moskow.

MR. MOSKOW. I have a question for Dave on the first paragraph of the Greenbook, where you said that labor markets have been stronger than we were expecting. Of course, just now you also talked about that and about the employment report on Friday. Then you said, "In constructing our forecast of aggregate activity, we've given greater weight to the data on spending and industrial production." I was just wondering why you decided to do that. You pointed to the labor market as an upside risk, but I was wondering why you decided to give greater weight to the spending and industrial production data.

MR. STOCKTON. I guess our basic feeling was that, if just the spending data had been weak, we would have probably had greater pause about downweighting the strength of the labor market segment. But we've also seen a weakness in industrial production, which is in physical product data as well. Then there's considerable noise in labor productivity, and the unemployment rate is typically a lagging indicator. So we thought that for now we would give more weight to the spending data as providing a signal that we probably have entered a period of below-trend growth than to the signals given by the labor market, which as I indicated in my briefing could be read as at trend or maybe above trend. We're looking for labor markets to be a bit of a lagging indicator this time around. We're anticipating some slowing in labor demand going forward and some bounceback in the unemployment rate. But I wanted to make clear in my briefing that, although we didn't dismiss the labor market, we did downweight it; and if our forecast is going to turn out to be right, we will have to see some slowing in labor markets relatively soon to confirm the basic story.

MR. MOSKOW. Otherwise, you change the forecast.

MR. STOCKTON. It's a legitimate possibility that we've just made the wrong call on GDP growth. Maybe we'll look back through a series of data revisions and maybe a strong fourth quarter or first quarter and will average through this and say, "In this period, growth really didn't slow to the 1½ percent pace that we thought was there." You may look back and say, "Gee, you should have given more weight to the labor market— it was giving you the better signal." In recent years, the labor market has not been as reliable a predictor of GDP growth as it was from the mid-1980s to the mid-1990s, when we could, in fact, use the labor market indicators and forecast GDP better than the advance estimate of the GDP that the BEA put out. That relationship has been broken down from the mid-1990s to now, when there has just been so



much more movement on the supply side of the economy and in productivity that it has been more difficult to use the labor market to project. That's one reason that we have leaned in the direction of the production and spending data.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Dave, if interest rates had held at the June level more or less, what might have been the effect on housing starts and the economy more generally? I realize in one sense that's an inadmissible question because you have to ask what makes an endogenous variable different from what it otherwise would have been, but suppose it had to do with the term premium or market expectations or something.

MR. STOCKTON. Roughly speaking, if we had been held back at the June level, we would estimate that housing starts probably would have been about 100,000 units weaker than they currently are. Running that through the model suggests roughly 0.3 percent on the level of GDP. Whether all that would have played out by now is not entirely clear. In terms of broader economic consequences, one thing that we showed in an alternative simulation in the Greenbook was, if this unusually low term premium turns quickly and we get a rise of another 50 basis points there accompanied by some weakness in the stock market and some endogenous response on credit spreads, the effect would be pretty powerful. It results in a forecast of an unemployment rate rising to 5½ percent, even with your easing of monetary policy, according to the estimated Taylor rule, down to 4 percent for the fed funds rate. I think that those kinds of movements in long-term interest rates work powerful effects on our overall economic outlook.

CHAIRMAN BERNANKE. President Pinalto.

MS. PIANALTO. Dave, the two measures of labor compensation that we typically look at—compensation per hour and the employment cost index—over a long period track each other

fairly closely, but in the shorter run there's more variance. Even though we've seen the recent downward revisions to compensation per hour, it's still running higher than the ECI. I was wondering how you have approached weighing these two series in your assessment of the labor market and also how your outlook for inflation would change if you put more weight on the ECI, which is lower than compensation per hour.

MR. STOCKTON. To answer the latter question: If we really threw away the information in the nonfarm business compensation that is taken from the national income accounts and focused solely on the ECI, we'd have a lower inflation forecast. In our overall price inflation projection, we use a variety of models. I talked about this a little earlier in the year when we got that big upward surprise. We have some models that just say, "Don't pay any attention to the labor market data: They're all so bad and they have so little predictive content for prices that you're better off just circumventing them altogether." Now, we have never felt comfortable that the right thing to do was to give zero weight to the labor market side of things; so in the projection we have looked at some of the models that incorporate those effects and used the ECI in some models and compensation per hour in others. Again, if you went totally with the nonfarm business compensation per hour in those models, you'd probably be at or maybe slightly above our current forecast. So I think there's a lot of uncertainty here.

One of the things that we wanted to signal was that there are huge amounts of uncertainty about what the NAIRU and potential output are. We show a simulation with a lower NAIRU. In constructing our forecast, we have to take a stand because we have to show you a forecast that is moving an economy back toward equilibrium. Sitting in your chair, however, you would obviously want to view this from a risk-management perspective and understand that our ability to be very precise there is quite weak. The recent compensation data put back on the table the possibility that

we're getting a signal from the labor market that not as much pressure is coming from the labor cost side as we had earlier thought.

MS. PIANALTO. Thank you.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. I have two questions that are sort of related. The first question has to do with the acceleration in core PCE prices that we saw earlier this year and were all obviously very concerned about. One rationale we've offered in trying to understand that acceleration was the pass-through effects from the previous year's rise in energy prices from about \$50 a barrel to something like \$75 a barrel. Given that energy prices have now fallen and it looks as though they're stabilizing around \$60 a barrel at least for now, how do you measure the effect on the pass-through into core PCE prices from that roughly 20 percent drop in oil prices? I can see the measurement going on in the headline; but as I look at your forecasts of core, they haven't responded to that same effect. Is there much pass-through in the model to core PCE prices from energy prices, or is there not? I'm trying to understand how you guys think about that.

The second question is related to inflation as well. In trying to understand this automobile thing—which I clearly do not entirely understand at this point—I saw your suggestion that an apparently anomalous large drop occurred in the PPI for trucks or something like that. Was that real or accurate? Are there any ramifications from that anomalous drop in the PPI? Does that measurement problem carry over to other price indexes—for example, the CPI? If it does carry over, does that mean that our estimates of the CPI are perhaps understated in the near term because of the same measurement problem? I don't know whether or not there's any relation between those two. Those are my two questions.

MR. STOCKTON. If I can answer that last question first—there isn't any consequence for the CPI. They actually measure motor vehicles differently in the PPI and the CPI. In the PPI, when they get to October, they start measuring the prices of just the 2007 model years, whereas in the CPI they are trying to phase in new models as people are actually buying them. The problem with the PPI that we discovered was that General Motors has two very popular truck lines and apparently did not actually introduce a 2007 model for these trucks but labeled them "2007 Classics." [Laughter] They discounted those heavily because they were anticipating that they would, in fact, introduce the 2007 model shortly. The statisticians at the BLS saw those 2007 Classics models, saw them as 2007 models, and said, "Gee, they've introduced a new model, and the price is dropping." So, on a seasonally adjusted basis, the prices really fell a lot. That just isn't right, and fortunately it doesn't contaminate anything beyond the PPI and its consequences.

MR. PLOSSER. That was really my question—whether it contaminated anything else.

MR. STOCKTON. On the first question—we think the slowdown in energy prices, the flattening out of energy prices, the actual decline of energy prices is probably going to be worth about ¼ percentage point of deceleration in core prices going forward.

MR. PLOSSER. That doesn't show up in your forecast.

MR. STOCKTON. Well, it is in the forecast. It's just not so easy to see on a revision-by-revision basis because we're also being surprised by the tightness of the overall labor market, by the decline of the dollar, and by somewhat higher import prices. So there have been other offsetting factors that are masking the underlying effect of the lower energy prices. We have built in those energy prices on the upside; we're taking them out on the downside; and they are, I think, an important factor behind the contour that we're projecting. It's just that there are other factors operating.

MR. PLOSSER. I was looking at the change from the August forecast of core inflation, which was before we had the big decline, and it really hasn't changed much. That's why I couldn't see why it hadn't had that much of an effect.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. David, with all the problems that labor indicators provide us, one striking thing in the recent report is that the service sector is what pulled the fat out of the fire. If my memory is correct, 83 percent of our employment is now in the service sector, over 70 percent of our output, and perhaps a greater percentage of value added. If you look at the numbers, there are, for example, more health care workers than manufacturing workers. There are perhaps as many in the entertainment/restaurant sector as in the manufacturing sector. So here's the question: Have we been able to identify any service sector subsectors that can be useful as indicators of turning points in the business cycle, as we often point to autos and durable goods? As we move up the value-added ladder through the service-sector-driven economy, the numbers are so big. It does concern me that we constantly refer to the old cyclical indicators, which are no doubt very important, but I'm wondering if we have been able to identify some subsectors in the service area that indicate turning points in the business cycle.

MR. STOCKTON. I don't know of any particular research that bears exactly on that question about whether or not we can identify cyclical service industries. For the most part, your basic point is well taken, which is that the service sector is larger, more stable, less interest sensitive, less prone to the kind of inventory backups and consequent significant production cuts and cyclical behavior than the manufacturing and construction sectors. Obviously the size of those two sectors has evolved, and it's conceivable that the economy itself will become less cyclical; but we'd still be thinking that if you're worried about cyclical turning points, the first place that you are likely to see

them is in the durable goods and manufacturing and construction areas. I think a reasonable research topic would ask whether or not the economy is changing in ways that one could find cyclical behavior in the service employment side of things, and I just don't know what the answer to that is.

MR. FISHER. Could I ask just a quick second question, which is totally different? I think I read a statement that we were getting diminishing returns on the previous tightening initiatives we took, but I may have read that incorrectly. Is that correct—now that we have a sense of the lag that we talked about before? Are we running the course of our previous tightening measures, which are having less effect on the economy?

MR. STOCKTON. I don't think you read that in anything that we wrote. [Laughter] That's not the way that we would be thinking about things—that somehow that there are diminishing returns to the potency of monetary policy.

MR. FISHER. So they are still having effect. Thank you.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. We're trying to decompose changes in forward nominal interest rates and figure out what are risk premiums, term premiums, real rates, and so forth. Have you looked at what's happening globally with the same basic objective and tried to decompose changes in forward rates or real rates outside the United States into their various components?

MR. KAMIN. There has been some work on that. It looks as though in a couple of foreign industrial countries that there is some evidence of declines in term premiums. It's very difficult to determine why those term premiums have been falling or, more generally, why long-term bond yields in the foreign countries have been going down recently with those in the United States. Part of that is likely due to the fact that global financial markets are extremely well integrated; so when

U.S. yields move, foreign yields have a tendency to move as well, along with the kind of changes in exchange rates you might expect.

CHAIRMAN BERNANKE. Are there other questions? If not, we're ready for our economic go-round. As always, two-handed interventions are available. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I have to admit that this time around I found it pretty challenging to read the tea leaves on economic activity. The data are providing distinctly contradictory signals. For example, several key indicators of aggregate spending have come in below expectations, and the Greenbook now sees real GDP growth this quarter and the next averaging a mere 1½ percent. At the same time, the labor market continues to be strong and shows no clear signs of weakening, as evidenced by the November employment report. The latest information on inflation has been fairly favorable; but even with some signs of easing, the underlying trend in core consumer price inflation remains above my comfort zone.

The last time we met I described the situation as a bimodal economy with strength in most sectors and weakness limited to just two sectors, housing and domestic auto production. This description by and large remains apt. The correction in the housing sector has continued, even sharpening somewhat compared with our expectations. Still, there are some encouraging signs that the demand for housing may be stabilizing, probably assisted by recent declines in mortgage rates. After a precipitous fall, home sales appear to have leveled off. In addition, equity valuations for homebuilders have continued to rise in the past couple of months, suggesting that the outlook for these businesses may be improving. Finally, the gap between housing prices and fundamentals may not be as large as some calculations suggest because real long-term interest rates have fallen quite a bit recently, raising the fundamental value of housing. That said, the housing sector on balance is a

source of downside risk, and the risk could be magnified if mortgage rates were to rise again as foreseen by the Greenbook.

Outside residential investment, GDP growth has remained solid. Consumption has continued to be strong; indeed, I think there are upside risks to consumer spending, given the Greenbook's forecast of a significant rise in the saving rate. But recent indicators of nonresidential investment and activity in the manufacturing sector have come in below expectations. The key question is whether these data hint at a crack in the economy's armor that could widen. It's obviously too early to tell, but these weaknesses bear careful monitoring.

Overall, the data on spending paint a clear picture of an economy growing well below trend, but it seems as though the BEA hasn't delivered this message to the BLS. [Laughter] The very latest data show payroll employment growing steadily. The household data are even more alarming. The unemployment rate has declined  $\frac{1}{2}$  percentage point over the past year and now stands at  $4\frac{1}{2}$  percent,  $\frac{1}{2}$  percentage point below our estimate of the NAIRU. My business contacts tell me the same thing. Labor markets are tight, and jobs are hard to fill, especially for skilled positions. But some other indicators suggest that labor markets may have softened a bit. In particular, the Conference Board index of job market perceptions, based on a survey of households, declined in both October and November. This index is historically very highly correlated with the unemployment rate, but now it's sending a different signal, suggesting that labor markets are roughly in balance. Similarly, in November fewer firms reported openings that are hard to fill.

The fall in the unemployment rate this year is hard to square with Okun's law. Over the past four quarters, GDP growth has averaged 3 percent, just 0.3 above the Board's estimate of potential GDP growth. A standard Okun's law calculation suggests that this should have led to a decline in the unemployment rate of only about 0.1 percentage point. In fact, however, it declined



0.5 percentage point. Of course, labor markets do adjust with a lag, so we may just need to be patient and wait for Okun's law to reassert itself as assumed in the Greenbook forecast. An alternative possibility is that the output gap is more positive than assumed in the Greenbook because of lower growth in potential output or more-rapid growth in actual output. In his presentation, David noted the possibility that the growth rate of potential output may be lower than even the downwardly revised estimate in the Greenbook. It is also possible—and, in fact, there are indications—that actual output growth may have been faster than the pace reflected in measured GDP. Growth in domestic income has outpaced GDP growth by  $\frac{3}{4}$  percentage point over the past year. Now I know that when someone mentions the statistical discrepancy, eyes start to glaze over. But I raise this issue because it could have important implications for the outlook. If the gross domestic income measure ends up being more accurate, then the decline in the unemployment rate this year would not be surprising. Going forward, more-rapid output growth would imply a lower path for unemployment, potentially adding to inflation pressures.

Turning to inflation itself, the news has been pretty good on balance since our last meeting. We expect core PCE price inflation to edge down from just under  $2\frac{1}{2}$  percent this year to about 2 percent in 2008. We came to this forecast balancing two main pieces of news. On the one hand, recent labor market data point to a lower path for the unemployment rate than before, and all else being equal, this boosts our inflation forecast a bit. Offsetting this effect, on the other hand, is the huge downward revision in compensation per hour. When these data came out, I let out a big sigh of relief. The revised data are more consistent with the indications we were getting from the employment cost index and suggest that wage growth has remained contained. In contrast, my contacts report intensifying wage pressures, resulting in part from more-frequent employee quits and outside offers. Even so, my contacts do not report that these developments are exerting

significant pressure on their profit margins or prices, suggesting continued strong productivity growth. But that, in turn, conflicts with the data on productivity growth in the nonfarm business sector, which have been weak, not strong. Output per hour in the nonfarm business sector increased only about 1½ percent over the past year, well below its trend. But there is reason to believe that this decline may overstate the slowing in productivity growth, given continued strong growth in productivity in the nonfinancial corporate sector. At least part of this discrepancy between nonfinancial corporate and nonfarm productivity growth reflects the gap I mentioned before between gross domestic income and gross domestic product. If the GDI numbers are, in fact, more accurate, that alone could add nearly 1 percentage point to nonfarm business productivity growth, perhaps reconciling the reports by my contacts of intensifying wage pressure along with an absence of pressure on prices and margins.

In summary, I continue to view a soft landing with moderating inflation as my best-guess forecast, conditional on maintaining the current stance of policy. But there are sizable risks on both sides to the outlook for growth, and the downside risks are now more palpable. There is, likewise, a great deal of uncertainty about inflation going forward; in this case, the risks remain biased to the high side.

CHAIRMAN BERNANKE. President Yellen, did I understand you to say that the GDI being higher than the GDP increases both actual output and potential output and so should be read as mostly a neutral distinction?

MS. YELLEN. I read that as suggesting that the growth of actual output might be understated. I suppose one could also contemplate the possibility that potential might be understated but I was hypothesizing that actual output is understated, and hence the gap between actual and potential may be larger than the Greenbook assumes.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Business activity in the Seventh District appears to be expanding at a slightly slower pace than the last time we met. But most of my contacts were still positive about the outlook, and when we put together our forecast for the national economy, we did not make any large changes to the projections of either growth or inflation. We see output recovering as we move into '07 and core PCE staying near its current rate through the forecast period.

As Janet discussed, we've talked about the bimodal nature of the national economy. Housing is weak, and the auto sector is struggling, but the rest of the economy is performing well. We see these sectoral differences, particularly with regard to autos, in our District economy. Michigan's unemployment rate is about 7 percent, and it was the only state to show a year-over-year decline in the OFHEO house price measure. In contrast, Illinois and Wisconsin have a more diversified manufacturing base, and they're doing well. Furthermore, we continue to hear reports of growth in demand for manufactured goods outside of autos and residential construction. One example of this is Caterpillar. They expect revenues from highway construction and mining equipment to remain strong with some easing in the U.S. market being offset by increased demand from abroad. Manufacturers of machine tools continue to report solid orders. Of course, such reports contrast sharply with our conversations with the Big Three automobile makers. General Motors indicates that they expect '07 to be another challenging year. Incentives are one issue. GM thinks that their own incentives are now about the right level, including the Classic, [laughter] whereas others are still high. Another issue is that the UAW contract will be coming up for renewal next year in September, and the negotiations are expected to be difficult.

Turning to labor markets more generally, Kelly and Manpower said that the overall nationwide placements of temporary workers were unchanged year over year, but placements of light industrial production workers continue to increase, and conversions from temporary to permanent remain strong. Moreover, their clients, while cautious, generally do not expect any prolonged period of weakness. These temp firms said that wage pressures were steady to down a bit, but a major national specialty retailer indicated that he was having difficulty hiring holiday workers and permanent workers and that he was planning for an increase of 10 to 12 percent in wages for entry-level full-time hires. Retailers also told us that they believed strong labor markets were supporting spending, and they were looking forward to good results for the holiday season.

With regard to inflation, even though energy prices have moved off their peaks, there were few signs of rollbacks in fuel surcharges. Indeed, we even heard of further cost pass-throughs from petroleum-based inputs. However, we did not get the sense that general cost pressures were intensifying.

Finally, we held our annual economic outlook symposium ten days ago in the midst of the first major snowstorm of the year. The three dozen hardy forecasters predicted real GDP growth of 2.8 percent in '07 and the employment rate to drift up to 4.9 percent by the second half of the year. They also forecast that total CPI would increase 2½ percent and that sales of light vehicles would be 16.4 million units.

Turning to the national outlook, the data have come in somewhat softer than I expected at our last meeting. Our uncertainty about the outlook has increased somewhat, but I still think that there are significant forces supporting activity and that the economy will return to a better growth path as we move into next year. To be sure, residential construction is quite weak, auto sales are softer, and the businesses supplying these industries are experiencing some sizable reductions in

demand. However, I do not get the sense of a secondary spillover to other sectors of the economy. Importantly, the labor market has remained robust, supporting household spending—as we’ve talked about. Business confidence appears to be holding up fairly well. Indeed, I’m impressed by the lack of pessimism among my contacts, even those who are experiencing flattening sales or sluggish sales. Finally, real interest rates are low across the maturity spectrum, and risk spreads remain narrow. Given the liquidity in the system, it’s still hard to see current financial conditions as being that restrictive.

In the end, we did not make any large changes to the overall contours of our GDP forecast. We still see the economy growing moderately below potential in ’07 and increasing at a pace moderately above potential in 2008. Now, we condition our baseline forecast on market expectations for interest rates. Accordingly, this outlook is boosted by the expected decline in the funds rate that’s in the market. If, like the Greenbook, we had assumed a flat federal funds rate path, we would project a recovery only to potential in ’08.

Turning to inflation, the recent data have not clarified the trends. The six-month change in the core PCE price index is down, but the three-month numbers have moved up. In Chicago, we like to use indicator models, like the ones that Stock and Watson developed, as a way to assess the implications of incoming data for future inflation. These are time series models, and they forecast inflation based on more than 80 economic indicators linked to inflationary pressures. The projections of these models have changed little since our last meeting. Our forecasts continue to show inflation running too high for my taste. Even our most optimistic models, which are estimated using data only since 1984, have core PCE inflation flat at 2.4 percent through 2008. In sum, I am still concerned that inflation will be too high for too long; and even though the downside risks to growth have increased, I continue to see inflation as the predominant risk.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, at the last meeting I provided anecdotal evidence, as I always do after my survey of CEOs and CFOs, of a slowdown for some sectors. I spoke of housing, which I've been a bit more concerned about to date than even our models have indicated. I referred to slowing trucking activity for the Christmas season, and I reported that the book-to-bill ratio for semiconductors, although that is highly volatile, slipped below 1 for the first time in quite some time. I also cited the aggressive consumer-product advertising as we approach year-end, which is occurring rather early. I concluded that, in netting those reports against the activity of the rails, the shipping companies, and other service-sector activity, growth in the third quarter seemed to have proceeded at a pace slightly north of 2 percent, or at least at a run rate about in that region. Then inflation measured by the trimmed mean, which as you know is how we like to look at things at the Dallas Federal Reserve Bank, though dipping in September was still hovering in the high 2s as measured over the three-month and twelve-month intervals. I expressed that, going forward, the balance seemed to be skewed more toward the inflation side than toward substandard growth.

I would agree with President Yellen and President Moskow, if I heard them correctly, that basically the tails have gotten a little fatter—that is, we're concerned that there might be slightly less growth, but at the same time we still have concerns about inflation. So I'd like to address the two very briefly. On the inflation front, in October the trimmed mean bounced back to 2.6 percent from the 1.6 percent that we had in September, driven upward, as David mentioned, by accelerating medical care prices and a pickup in owners' equivalent rent, although that was somewhat slight. The median PCE inflation rate was 4 percent. Of concern to me is that, although the percentage of goods with rising prices fell, the percentage with more-rapid increases rose and components with a

rise of over 5 percent have gone from 16 percent to 30 percent of the components measured overall in October.

With regard to economic activity, I think there are some continued negatives and some positives. I'd like to pick up on the negatives that I mentioned at the last meeting. The airlines that I discussed are reporting even more aggressive discounting. One of my contacts, who I think is the longest serving and most successful CEO in the airline industry, said this is the most aggressive discounting that he remembers. Of course, we've all seen Wal-Mart's numbers. There is difficulty in sorting through what is of their own making in terms of their branding and what is the overall slowdown in activity. But the truckers to whom I have been talking are still not noticing the pickup in the Christmas activity that they expected, Mr. Chairman. Other retailers, too, are reporting some softness. There is some discussion of whether or not it makes a difference that we have one extra day in the retailing season for Christmas this year. The Thanksgiving surge that they expected in sales clearly did not occur in almost every category of income except for the very highest. The semiconductor producers are reporting a "grim" outlook in terms of their book-to-bill ratios and what they're selling forward. I have just one other comment on energy. Perhaps the largest operator for the OPEC countries points out that they have realized 60 percent of their announced cuts—that's a typical ratio. Al-Naimi, who is the Minister of Petroleum and Mineral Resources of Saudi Arabia, is pressing for another million barrel cut, presumably to bring the total cut up to the 1.2 million barrels that were being targeted. So the negatives seem to still be in place.

As far as the positives are concerned, at least at the margin, I'd like to report on a few of them. One is that convenience store operators are reporting a little turn-up in volume and finally seeing the effect of lower gas prices at the pump, and retailers in the past week have noticed a slight pickup from what they were reporting at the end of the November holiday season. With regard to

housing, as you know, I speak to two of the five largest builders, and I've added a third to that sample. David, they are reporting what they call a sense of a turn, but this may be their perpetual optimism. But cancellation rates have improved from 40 percent to 32 percent according to the reports, and actually in November there was a gross pickup in unit sales of about 3 percent according to these reports. So they are feeling that some pent-up demand is building. The interesting thing about that industry in particular is that they are all walking away from their options. One of the largest said that they expect to end up with only 20 percent of their land options, and yet land prices have not yet fallen. So I think that's the next shoe that will likely drop.

Other than housing, in surveying the twenty-six CEOs and three CFOs to whom I speak, I hear no report of consumer or client payment problems or lagging payments, which is often an indicator, on a serial basis, that there is weakness ensuing. Again, going back to one of my favorite indicators, which is a large express shipper, my contact said, "I don't feel any real changes from what we saw in the last four to five months." That large express shipper is looking at GDP growth of about 2 percent or slightly north of 2 percent. Also, I like to look at restaurants because they employ perhaps up to 14 million people, so it's not an unimportant sector. For the twenty-five companies in the casual dining sector, sales have declined. At the same time, their guest count has gone down even further, which indicates what we expected before—if you'll forgive the pun—a move down the food chain from restaurants like Chili's to McDonald's and so on. This is what you would expect in terms of continued tightness, and yet they are beginning to sense a slight turn because gas prices at the pump may be kicking in.

Finally, I want to touch on some negatives disguised as positives. The first is the ready availability of capital. I think Dino was very good in his presentation this morning, as he always is. One CEO of a company in the service sector, largely in the entertainment business, does not see



much slowing taking place. He said that the availability of capital is like “dog droppings in Central Park”—no matter where you step, capital is readily available. To an old pension fund manager like me that indicates a potential trip wire, which is what Dino said. So I think risk is certainly there. Another negative disguised as a positive would be the robust activity we’re still seeing in the energy sector, although I would summarize it by saying that the foot has been taken off the accelerator. We haven’t stopped. There’s a bit less rig count in the mix, and yet there’s still a great deal of construction activity, as we find that the petrochemicals are improving their refining capacity and meeting modern standards, and there are huge numbers of coal gasification projects, not just in Texas utilities but also elsewhere in the country.

Mr. Chairman, the labor shortage in the Gulf—the Golden Coast, as we call it—is significant. One oil company alone estimates that, for petrochemical purposes, they are at least 20,000 workers short. The mayor of Texas City, which has the highest concentration of petrochemical plants in the country in his district, called a meeting of all the labor unions last month. The mayor, who sits on our board, said that the unions report that they cannot find workers. If TXU proceeds with the coal gasification plants, they’re looking at 5 million manhours per project, and they have ten projects on the board, assuming that they’re approved. The point is that we do still see a significant shortage of skilled and semi-skilled labor. So as you depart for China, Mr. Chairman, having spoken about the two fat tails, I would urge you to be careful of any Fu dogs with two tails. [Laughter]

CHAIRMAN BERNANKE. On that note, President Minehan. [Laughter]

MS. MINEHAN. It’s not fair. [Laughter] Well, to the extent that this sounds like North Dakota, let me just proceed. Despite data from the housing markets that suggest that New England is suffering the real estate slowdown perhaps more than the rest of the nation—at least in terms of

falling house prices—the overall regional economy appears to be doing fairly well. This is the bimodal model that a couple of people have talked about. Moderate employment growth continues. Layoffs are down, and electronic job postings, as opposed to newspaper want ads, are rising. Retailers are cautious about the fallout from the housing market, but except for those in the hardware or furniture businesses, sales were reportedly buoyed by the drop in gasoline prices. Indeed, October saw the first year-over-year decline in gas prices in the Boston area in four years. Manufacturing overall has been running ahead of last year, with aircraft, energy, and scientific equipment particularly robust. Growth in high-tech and biotech service companies remains strong; and while wage growth overall is slightly below national levels, salaries for higher-skilled staff with professional degrees are being bid up, reflecting strong demand. Consumer confidence is solid, especially regarding future conditions, and I've seen the same thing that President Moskow commented on—the optimism of business contacts. Business confidence as measured by local organizations has been on a steady upward trend since June, with employers significantly more positive about national economic conditions, the rising stock market, falling energy prices, and favorable interest rates. The mild fall weather, although a major problem for the early ski season, boosted tourism, which is reportedly going gangbusters—that's a technical term—in Boston and other areas. Convention sites are booked ahead, and hotel rates are rising.

The regional housing market continues on the downside. Sales of existing homes declined 20 percent from their year-earlier peaks, and inventories and time on the market continue to rise. Prices of existing homes were down in New England overall for the first six months of the year and down again from Q2 to Q3 for three of the six states, according to the OFHEO index. Moreover, new housing permits were down 13 percent, and the dollar value of construction contracts was off sharply. However, New England's market for new construction is small, and as near as we can see,

not much speculative building occurred during the boom. Thus, homebuilder finances remain in relatively reasonable shape. There will likely be write-offs for suppliers this winter and perhaps some consolidation in the local industry, but we don't see many major local economic effects from this. On the positive side, price-level declines have the welcome effect of making regional housing stock, particularly housing in the Boston area, more affordable. Suppliers and bankers noted that they saw signs of a modest pickup in sales in September and October, and they look forward to a brighter spring season if mortgage rates stay at their current lows.

Commercial real estate remains a very different world, however. In fact, comments regarding commercial real estate investment in a number of cities around New England have served to highlight the liquidity that continues to characterize debt and asset markets, driving the yields lower, keeping spreads tight, and moving prices of even unlikely assets higher. In the notes from our Beige Book contacts was a very interesting conversation with a commercial real estate firm in Hartford, Connecticut, which has long been a depressed area. The contact reported that Hartford was attracting institutional investment interest for the first time since the 1980s and that commercial real estate deals were being done with cap rates of 7 to 8 percent. Providence reported similar commercial real estate strength; and in Boston, cap rates were said to be a bit below 6 percent. Pricing action in Boston remained above replacement cost with inflows of funds for deals reportedly from Middle Eastern and Irish sources. Vacancy rates in Boston are down. Rental rates are up, and pressure to serve the growth of new biotech firms is reportedly creating hot commercial real estate markets in Cambridge and in suburban areas just west of the city. While hot commercial real estate markets in eastern Massachusetts and even Providence are not particularly new news, such interest in Hartford really is. On the one hand, investor interest in places like Hartford may be a sign of real

overheating. On the other hand, if the lid stays on, areas like Hartford stand to benefit from a rise in investment and, one hopes, related job growth.

Turning to the nation, the recent tone of the incoming data, especially on the manufacturing side, has been subdued, as declines in the housing market and in motor vehicle spending and production have taken their toll. But I think this tone may well result from the ebb and flow of high-frequency observations. At the time of our last meeting, incoming data seemed more positive overall, and many of the factors present then—including solid employment growth, low unemployment, healthy debt and equity markets, solid corporate profits, good foreign growth, and a less negative or even a neutral-to-positive effect of net exports—remain. Fourth-quarter GDP data may well be disappointing to the markets, but given both what the staff believes is a calculation error on the part of the BEA and the fact that so many supportive factors remain, I am hopeful about prospects for '07 and '08.

Our forecast in Boston retains the same trajectory as the Greenbook's—a slow fourth quarter and a growing rebound over the next couple of years as residential investment recovers combined with a gradual small uptick in unemployment and an ebb in core inflation to the low 2s. Thus, despite the sense in markets that momentum has shifted downward, I don't think that the baseline outlook has changed much since our last meeting, and the Greenbook forecast reflects that pretty well. Similarly, although risks exist both that growth will be slower and that inflation will be faster, I believe those risks to be fairly balanced at this point, though they are certainly not minor. Of concern, however, is the cost of being wrong on the inflation side. This is certainly not the time to let down our guard on this front with labor markets fairly tight, the unemployment rate at 4½ percent, and most of the downward effect of declining energy prices behind us. We could see inflation move sideways rather than down, and that could well be an issue. Markets see us

beginning to ease as soon as the late first quarter, early second. Perhaps they're right, but I remain to be convinced by the incoming data. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Economic activity continued to expand moderately in our District in November. Manufacturing shipments and new orders bucked the national trend and rebounded last month following an October dip. Revenues and hiring slowed a bit in the service sector but continued to expand moderately. Retail was a bright spot: Stores reported an uptick in sales and customer traffic for November, including the Thanksgiving weekend. Our store contacts were generally optimistic about sales prospects for the coming holiday season. Fifth District housing activity continues to soften on the whole, although there are areas that have seen much less, if any, of a slowdown. We're not hearing any reports of cutbacks in capital expenditures, and commercial real estate markets appear to remain fairly strong in our District. Reports on price pressures were mixed in November but remained at elevated levels.

At the national level, an essential question seems to be how long the current weakness will persist. To a large extent this question centers on the housing market, and it's still hard to pin down the outlook with much certainty. The special survey on homebuilders paints a picture that varies widely across the country. Construction activity is falling at a rapid clip in many regions, but many housing markets are still fairly stable. Nationally, there are some indicators suggesting that housing demand has stabilized at a low level. Sales of new homes have been fluctuating around an annual rate of 1 million since July, and purchase mortgage applications have been fairly flat since then as well. But the national data also show a sizable overhang of housing inventory that will continue to depress new building activity going forward. If—and, like David, I recognize this is a big “if”—the demand for housing holds up at current levels—and favorable fundamentals such as moderate

mortgage rates and continued real income gains should help—then the adjustment process is simply a matter of working inventories down. This is consistent with the Greenbook's estimate that residential investment will no longer subtract from real GDP growth after the first half of next year.

The strength in nonresidential construction has until recently offset the decline in residential. Most recent reports show nonresidential construction spending and employment falling in recent months, although I'm struck by the fact that there are hardly any references in the Beige Book to deterioration in commercial construction and we aren't hearing such reports from our contacts either. So I'm not sure how much to mark down the nonresidential outlook just now.

As David said, consumer spending keeps chugging along at about 3 percent despite weakening auto sales. This is notable because one way the housing downturn could spread to the remainder of the economy is through a wealth effect. So far I'm not persuaded by this gloomy view, and I think there are good reasons to doubt it. Household net worth looks pretty strong, and equities continue to advance. The other leading candidate for a spillover channel is the labor market, but so far the weakness in construction and real-estate-related employment has not been large enough to offset the broader strength in employment. I remain skeptical of a housing-induced step-down in consumption growth. Business investment continues to be a source of strength. The Greenbook notes the possibility of negative accelerator effects, but the other fundamentals still look good. Profitability is high, and cost of capital is low. Moreover, financial markets are not showing signs of impending business weakness or investment slowdown. In sum, it looks as though the current weakness is likely to be relatively transitory, and after the housing market correction plays out, we should return to near-trend growth. There are risks to this outlook, to be sure, but this is what looks most likely to me right now.

The recent news on inflation has been disappointing yet again. It is now quite difficult to discern any moderating trend in core PCE inflation over the past several months. You have to be really careful in selecting how many periods you average over, and I have serious doubts about the forces that are described as slowing inflation over the forecast period. First, the recent fall in energy prices is now behind us by a couple of months, and prices are beginning to rise again. If the Greenbook forecast is correct and in 2007 crude oil prices rise somewhat above their current level of \$62 per barrel, then we have seen all we are going to see of the abatement of the effects of higher energy prices on core inflation, speaking to President Plosser's point. Second, since the odds seem to favor a further depreciation of the dollar, I think import prices are unlikely to help ease inflation much. Third, as we've discussed at previous meetings, the projected increase in unemployment is not likely to have much of an effect on inflation, over the forecast period at least. On top of all this, inflation expectations appear to be anchored between 2 and 2¼ percent right now, and they're likely to exert a gravitational pull counteracting any moderation of inflation. Thank you.

CHAIRMAN BERNANKE. Thank you. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. My outlook for the economy hasn't changed much since our last meeting, but I have become more concerned about the risk to the outlook for real growth. So in my comments this morning, I'll explain why my risk assessment has changed.

The homebuilders with whom I spoke over the past several weeks told me that the low interest rates and the new financial products created an environment in which they did five years' worth of business in the space of three years. They said that most homebuilders recognized that this pace of activity was unsustainable and so they planned accordingly. A few small builders have declared bankruptcy, and others still may do so; but for the most part, builders feel that they are

financially prepared to make it through the next one or two years of poor business. So the financial condition of homebuilders is not my chief concern.

However, I have become more worried about the potential spillover of housing conditions into consumer spending from wealth effects, income constraints, and creditworthiness. I think I'm going to give the counterpoint to President Lacker on these issues. The Greenbook points out that the OFHEO price index is still increasing a bit, but the builders I met with convinced me that the published prices for new homes don't accurately reflect market conditions. Sellers are offering nonprice concessions, such as upgrades for appliances, carpets, fixtures, and so forth. Some builders are going to great lengths to keep published prices up. I've been told stories of builders in Arizona who have been giving buyers new Lexuses as part of the overall deal so that they don't have to bring down the prices in their subdivision. Also, it seems as though owners of existing homes are not yet willing to reduce their asking prices by very much. With potential buyers still waiting for prices to fall further, traffic levels and transactions are low. It seems as though markets are not yet close to functioning smoothly, and homebuilders are telling me that it could take another year before buyers and sellers exhibit more confidence. I am concerned that we don't yet have a good handle on where house prices are headed and how the uncertainties surrounding house prices might affect consumer spending. Second, the support to consumption provided by cash-out refinancing is not likely to be available going forward to the same degree that we've had during the past several years. Finally, the financial condition of some households has become pretty fragile, and we all know that rates on adjustable mortgages, including some subprime mortgage loans, continue to reset at higher rates. The adjustable rate mortgages are already causing some well-publicized problems for some households.



Builders in my region report that the ability of potential homebuyers to qualify for home mortgages is becoming an issue. One homebuilder from Columbus told me that he is giving away new cars as well, but his motivation provides a twist on the Lexus story. Some of his customers are struggling to qualify for mortgage loans. So he's giving them new cars so that they can get rid of their current cars and the payment obligations that go along with them. [Laughter] He's not giving them a Lexus; he's giving them a Kia. [Laughter] Now, if we could get these homebuilders to adopt a Buy American strategy, we might also be able to solve our domestic auto problem.

As I said at the outset, I don't have a major disagreement with the Greenbook baseline. I think that the outlook for near-term growth has deteriorated a little since October, and the Greenbook reflects that. I just think that there's greater likelihood that the real economy could prove to be weaker than the baseline in the Greenbook in 2007, and the key risk in my view is the degree of spillover from the housing market into the rest of the economy. The Greenbook's extended house decline alternative scenario represents this risk, although I have not yet heard stories that are quite as dramatic as the 20 percent decline in home prices in that scenario.

Not much has changed, as many others have already commented, in the inflation outlook. The inflation trend continues to be hard to interpret, but I still expect core inflation to drift down gradually over the forecast period. Although there is still a risk that inflation will remain higher than I desire, I think that favorable compensation developments and declines in shelter costs could speed that rate of decline. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I have to begin by saying that Janet Yellen, without doubt, has provided the most brilliant exposition of "on the one hand and on the other hand." [Laughter]

MS. YELLEN. Thank you. [Laughter]

MR. POOLE. I think I may be able to clarify the Wal-Mart outlook a bit. There's been a lot of publicity that Wal-Mart reported November year-over-year same store sales to be, I think, 0.1 percentage point down. The Wal-Mart take on the situation is that the problem is about 75 percent in the forecast that they had and about 25 percent that sales are actually coming in a little weaker than forecast. The big miss is that, in the year-over-year comparisons, there's an enduring effect that was larger than they had earlier realized of the sales in the hurricane-affected regions. People whose homes were destroyed went out and bought toasters, apparel, and all sorts of other things to replace the stuff that they lost, and that pumped up year-ago sales. They're expecting that effect to continue to affect year-over-year comparisons through March, obviously tapering off. The other thing that they note—and this I think is perhaps a little more problematic—is that they continue to open lots of stores. They know that the store locations in some cases cannibalize sales from existing stores. So when they try to make allowance for those things, they say that October and probably also in November, although they haven't completed that analysis, would have been about 3.8 percent above, year over year. They would have expected on this basis 4.5 percent to 5 percent. So they are running below the expectation. The overall impression of the holiday season is that it's going to be good but not great. On the average shopping basket, the prices for goods sold are up about 1.1 percent year over year. Wal-Mart does not see much inflation pressure. They expect to be seeking price cuts from suppliers. Apparently consumer product companies generally adjust prices in the first quarter of the year, and they end up negotiating with Wal-Mart, and Wal-Mart is expecting to ask for some price reductions. A contact with a major money center bank indicates that their analysis of their credit card activity suggests that year-over-year retail sales have decelerated a little. They expect the holiday retail season to be okay but not great.

My contact at UPS said in a conversation last week that the Christmas season has been somewhat slow to materialize in terms of volume since Thanksgiving. When I talked with him yesterday afternoon, he said that probably most of that was a consequence of weather, which delayed their volume. Perhaps more interesting, UPS is expecting international volume to be up 11 percent in 2007 compared with 2006. Their '06 over '05 output was 19.4 percent; 19 to 11 is a significant decline in growth. For domestic express, they're expecting '07—I guess the annual average—to be up 1.2 percent over '06; the '06 over '05 comparison was 4.8 percent. So the deceleration in '07 is significant. On the labor front, they don't have any particular issue, and they're not having labor availability issues. My FedEx contact had a similar outlook. FedEx has somewhat downgraded its expectation for next year. Again, he said that the company is starting to see momentum softening “as many others are.”

The most downbeat contact was a large trucking firm. He started off by saying that “things are pretty slow.” He said that the trucking business never had a third-quarter or fourth-quarter peak. They just didn't have a shipping peak. He said their customers are not too concerned. Shipping rates are down 4 to 5 percent year over year, and they've actually cut pay for new drivers. They had increased it back in July. They put the new driver pay back where it had been before, and they have also been laying off some drivers. I guess that's the main thing. The company is not buying any new trucks next year.

I have a couple of comments on the outlook. To me the only way to reconcile what we see going on in the equity and the bond markets is that the markets together are anticipating declining inflation pressure and continued good economic growth. One market or the other may be making a mistake, but if you want to assume that they're well-informed people making good estimates, then it seems to me that's the way to reconcile those observations. My view of the Greenbook forecast is

that it's very sensible. My own assessment is that outcomes above or below the forecast on both output and inflation have roughly equal probabilities; they've cut it right down the middle. It makes good sense. Both the Greenbook and the Blue Chip and other forecasters have been reducing their forecasts for '07. If you look at the Greenbook, Part 1, page 23, there's a nice chart of how the forecast has come down over this year. That's all for me right now. Thank you.

CHAIRMAN BERNANKE. Thank you.

MR. LACKER. Mr. Chairman.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Bill, you talked about reconciling bond and equity markets based on a view that inflation pressures will ease and growth will be good. When you say "inflation pressures will ease," do you mean that inflation will come down or that we will not be motivated to raise real rates?

MR. POOLE. One possibility would be to say that the markets might believe that we will be perfectly okay with inflation continuing to run  $2\frac{1}{4}$ ,  $2\frac{1}{2}$ , or something like that. That is a possibility. But the way I would look at it is that the market would probably believe that we would be just holding the fed funds rate target constant in that situation. To have a market forecast of a declining fed funds rate, which is what's in the bond market, it seems to me that you have to be anticipating that rates will come down. Now, I think that can't be a recession outlook because otherwise the equity market wouldn't be as strong as it is. So that's why I came to that conclusion. One market or the other may be making a mistake, but I was saying that's what I think is the best explanation of what the market sees.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. The economic picture in our region has changed little since our last meeting. The coincident indicators in our Business Outlook Survey suggested that economic activity continues to expand at a moderate pace in each of our three states, and the business contacts expect that pace to continue. I'm beginning to feel as though I'm reading the same chapter of the book again. It's like Yogi Berra—it's déjà vu all over again.

The weakest sector in our region, as in the nation, is of course housing, which continues to decline. Sales and permits continue on a downward trend, and cancellations rose significantly in November; but builders have been able to resell, albeit at lower prices, homes whose initial purchasers have reneged. However, our survey of smaller homebuilders suggests that conditions on average in the housing market in our District seem somewhat better than in the nation as a whole. None of the builders we polled reported low inventories of unsold homes. Interestingly enough, 86 percent of them said their inventories were about right; only 14 percent said inventories were high; and no one reported that they were extremely high. In comparison, across the nation, 51 percent of builders reported that inventories were either low or about right, and 49 percent reported either high or extremely high inventories. Certainly some areas in our District have had a sharp drop in housing activity. The most notable is the Jersey Shore. But generally, based on what I'm hearing from firms in our District, I would continue to characterize the decline in housing in our region as an orderly one.

Commercial real estate continues to perform very well. We've had some downturn in the value of nonresidential building contracts in the last month, but these data are very volatile, and the revisions tend to be upward as new contracts are reported over time. Our contacts in that sector continue to be among the most optimistic in our region. Office vacancy rates continued to decline in the past few months both in Center City Philadelphia and in the suburbs, and the net absorption of

office space continues to be positive. Rents have risen, and the increase in occupancy has led to a scarcity of large blocks of available space, which bodes well for construction.

Manufacturing activity in our region has been softening this fall, and we haven't seen much of an increase since then. After two negative readings in September and October, the general index of economic activity in our business outlook survey turned positive in November, but its level of slightly above 5 suggests that that's really not much change in the outlook. New orders and shipments were modestly weak. Shipments were actually strong. Orders were a little weaker, but the recent weakness is consistent with softness in national manufacturing and, as we've seen, in the purchasing managers' index. Optimism for future capital spending actually rebounded last month—so the picture there is very mixed. Consumer spending continues to hold up well. Auto dealers and retailers reported strong sales in November and are optimistic about the holiday season.

Labor market conditions in the District have changed little. Payroll employment growth in our three states is up at an annual rate of about 0.7 percent, which is slower than the national rate, but that's just a fact of the population growth in our District. Unemployment rates remain low, near or below the national rates. Business contacts continue to cite difficulty in finding qualified workers, especially for skilled and professional positions. Area employers indicate that, over the past few months, wages have been steadily rising at a pace higher than earlier this year.

I also want to mention some anecdotal information that I find interesting. Last week I met with a number of mostly manufacturing CEOs from my District. An observation that one of them made, which many agreed with, was that from their perspective money was almost free. This observation is consistent with what some others have been saying around the table. They thought that there was plenty of liquidity and that interest rates were not limiting them particularly in any way. This observation is also consistent with the views that mortgages rates are still relatively low

and that credit spreads show less stress on businesses at this point. I take these observations to indicate that monetary policy is not particularly restrictive at this point.

Also on the anecdotal side, the several manufacturers who participate as suppliers to both homebuilding and commercial real estate lamented their housing-related business, whether plumbing, cabinetry, or flooring, which were the three industries represented. On the residential side, the markets were terrible. Business was very bad. However, they all said that the commercial side was booming so much that it more than made up for their weakness on the residential side so that business tended to still be pretty good.

In contrast to President Poole's comment about trucking, I had one trucking CEO who said actually that business was good. It was weak in the Northeast—shipments were down there—but in the South and West their business was picking up and doing pretty well. He also made an interesting comment that I had not really thought about. He said that part of the change in trucking is that, while volumes may be down and they are having trouble finding drivers, there has also been a revolution in packaging. In fact, even though trucking volumes are down, the value of products and goods being shipped is actually up. As an example, they used to ship the big boom boxes that people listened to music on; now they're shipping iPods. So as packaging has become more efficient and more protective, the truck volume is less, but the value is actually higher. He said that this was an ongoing trend in the trucking industry and that one had to be careful about interpreting volumes.

On the inflation front, manufacturers continue to report higher production costs, but these cost increases have been less widespread than recent surveys indicated. Indexes of prices paid and prices received have continued to climb, and they're still above where we'd like to see them.

On the national side, my outlook has changed very little since our last meeting. Compared with earlier this year, growth has weakened, as we all know and have discussed. Housing slowed a little faster than perhaps we anticipated but—I agree with President Lacker—the prospects of spillovers remain relatively low. Again, as Bill applauded Janet’s wonderful one-handed/two-handed presentation, the labor markets are sending a completely different signal. As I said earlier, manufacturers and employers in our region continue to find scarcity in the labor market, both skilled and unskilled. If we thought that the economy were weakening and we expected growth to remain appreciably below potential and weak for a number of additional quarters, it might be important to allow short-term interest rates to move down—but not because I think the Fed can do much to prop up growth in those circumstances, that is, to ride some kind of Phillips curve. After all, businesses say there’s ample liquidity, and mortgage rates remain relatively low. But because equilibrium market rates may be lower over a sustained period, we might want to see a fed funds rate that’s consistent with that. This would be particularly relevant if we were sanguine about inflation. However, in my view, we’re not in that situation yet.

As has been alluded to, many market commentators have pointed to the inversion of the yield curve as an indicator that recession is probable, but as suggested by the Chairman and the research that has been done, some of it by the Board staff, the predictive power of changes in the slope of the yield curve depends on why the slope of the yield curve changes. The change in the slope of the yield curve suggested by the research that was alluded to earlier has been about 100 basis points, but about half of that has been in the risk premium associated with long-term rates. At the same time, the predictive content of that risk premium change for recession or GDP growth is much less than absolute changes in real rates. So I take that research to say that the inversion of the yield curve may be forecasting slower growth but not a recession to date.



Thus, inflation remains a significant concern to me. Recent readings on headline inflation have shown some encouraging downward movement, and inflation expectations have remained stable. But the level of core inflation continues to be higher than what I consider to be consistent with price stability. Moreover, the forecast does not show us reestablishing price stability in the near future. That's a reasonable, although unwelcome, forecast to the extent that very accommodative monetary policy over the past five years helped fuel the acceleration of inflation and that monetary policy and financial markets have not tightened much and aren't expected to tighten much over the coming period. The Bluebook indicates that the current real fed funds rate is within the range of model-based estimates of the equilibrium rate—that is, policy is not terribly tight—and, as I suggested earlier, long rates including mortgage rates are at relatively low levels, suggesting ample liquidity in the market.

I'm not convinced that price stability will be achieved without further action on the part of the Fed, and I'd feel more comfortable after seeing a few more months or even another quarter or two of deceleration. The slight deceleration in core inflation that we have seen, coupled with the slower economic growth, has meant that implicit firming of policy even without a change in the nominal funds rate might be in the cards, and that would be a welcome change. I'm not convinced that the recent decline in energy prices will provide the relief we would like to see in core inflation. As suggested by Jeff and my question earlier, I'm concerned that, if oil prices stabilize around \$60 a barrel, we will see core inflation begin to creep back up once the temporary benefits of the decline have disappeared. Indeed, gasoline prices have already risen somewhat in the past few weeks from the lows that we saw in late September and early October. As has been mentioned, the sharpest increases in the components of inflation that we've looked at over the past few months seem to be in those elements that are least likely to be influenced by energy prices. In addition, as Jeff said, I'm

very dubious that the gap measures that we allude to periodically are going to act as much of a constraint on price increases going forward. The bottom line is that I'm not hopeful that energy prices or the output gap will provide us with much of the inflationary relief that we're looking for.

Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. Overall, the Tenth District economy continues to expand at a moderate pace. Activity has slowed somewhat, but our region is still probably doing a little better than the nation as a whole. One area in which we may be doing a bit better is housing, even though we have slowed just as everyone else has. Our surveys show that the inventories of unsold homes, although elevated, are less than they are in other regions of the country and that they have not accelerated much since last summer. Our real estate contacts have indicated to us that they think inventories will be coming down over the next few months because the slowing in construction is bringing them back into line. It will take some time, however.

On the manufacturing side also, we have a bit more positive information in the region than perhaps nationwide. While we have had a slowdown in areas related to housing and autos, the areas related to oil and gas, railroads, commercial offices, and high-tech equipment in the District are generally noting strong and even increasing demand, and we're expecting those businesses to expand their operations accordingly. Some of our machinists and machine manufacturing organizations have actually seen some fairly strong growth, and their six-month outlook is also strong, especially in the export sector. Energy activity has remained strong in the District, despite some declines in our mountain region, where costs of drilling are higher, and

that has caused some reduction in rig count. Other areas in the Oklahoma panhandle and so forth are really going quite strong.

Consumer spending remains solid, and early holiday returns have generally been quite positive. Mall managers in the District's cities reported solid traffic after Thanksgiving, and we're off to a very good start for the December holidays. Labor markets also remain fairly good in the region, and as others have reported, our demand for skilled labor is really quite good, and finding individuals to fill positions is difficult right now. However, a couple of pieces of anecdotal information offset that a bit. In the past couple of months, the temporary hiring area has had a slowdown in their sales growth, which surprised the chairman of our board of directors to some degree—I don't know whether he mentioned this last week when he was here. Also, a couple of major trucking firms, while not saying that business is bad or anything like that, are saying that business is noticeably slower than it has been in other such holiday periods. Whether or not it's packaging they're not willing to say, but they are saying that it sure is slower.

On the national outlook, I don't have any real disagreements with the Greenbook in that we see growth to be below potential. What potential is may be a question. However, we do see growth below potential but returning gradually over 2007 into 2008. Obvious risks to that forecast are, on the downside, housing and, on the upside, perhaps some strength in foreign demand. We have seen the latter, as I mentioned, in our manufacturing sector, and I think it may bring some strength to the economy as we look ahead.

On the inflation front, our outlook is for inflation to come down gradually—we continue to think that monetary policy is slightly restrictive—and, with that, inflation numbers. For example, core CPI inflation would come down from 2.8 percent to 2.5 percent in '07 and perhaps to 2.3 percent in '08; the core PCE would average around 2 percent over 2007 and 2008, falling

from 2.1 to 1.9. Those are obviously rough estimates, but they are showing the trend. The risks, of course, are in what happens to energy. On the other side, frankly, is what happens to the dollar because, if that continues to go down, it would create some upside inflationary pressures that we'd have to think about and deal with as we go forward. So with that, I will stop and wait for the policy discussion for the rest of my comments. Thank you.

CHAIRMAN BERNANKE. Thank you. First Vice President Barron.

MR. BARRON. Thank you, Mr. Chairman. Over the intermeeting period, the Sixth District's economic activity largely reflected the trends in the nation as a whole. But the magnitude has been amplified by the region's relatively large exposure to housing-related activities. Specifically, while Florida continues to bear the brunt of the housing correction, we have increasingly heard reports of sales declines in other areas, too. For instance, an announcement at a recent conference of Atlanta homebuilders was that "Atlanta's ability to outrun the downturn has run out." The recent survey of the Beige Book would confirm this, in that contacts indicated that 67 percent of the District builders consider their inventory of unsold new homes to be either high or extremely high.

The decline in housing market activity is affecting housing-related sectors such as construction, real estate services, wood products and manufacturing, and carpet production, to which our District is more exposed than are other parts of the country. For instance, Florida has a concentration of residential construction that is about 50 percent greater than that of the United States as a whole, and Florida's construction employment has been declining at an annualized pace of 10 percent each month since May. Georgia is home to the largest concentration of carpet production in the United States, and these firms have reported that they are scaling back production as well as employment. We expect the negative effect on construction-related sectors

to intensify over the next few months as builders complete current projects and significantly curtail future projects. Lending related to real estate has been a significant source of revenue and growth for District banks in recent years. Our banking contacts report that the pipeline of real estate lending has all but dried up. Some also noted concern about the prospective financial strength of smaller builders, although most expect the larger builders to be able to weather the downturn. On the consumer side, asset quality remained good, but some banks noted concern about the potential negative effects from adjustable rate mortgage resets that will occur in 2007. The good news for the housing outlook is that the continued decline in starts and the leveling-off of sales may have arrested the run-up in the inventories of unsold new housing. It's hard to tell if we're getting close to the bottom of the housing slump. Several of our builder contacts in Florida say that they expect sales to improve in the second quarter of 2007. Also, most contacts expect a pickup in the multifamily rental market in 2007.

Outside the housing sector, indicators of economic performance in the District were mixed. Nonresidential construction remains at modest levels, with the pace for October and November being about what it was in 2005. Builders expect that the overall pace for 2007 will match that of 2006, and signs are that the demand for office and industrial space is picking up, with lower vacancies and rents beginning to firm. Early reports on holiday retail sales were on the positive side. However, tourism performance in Florida has disappointed in recent months. Visitors to all areas of Florida are down so far in 2006, which could give the state the first year-over-year drop since the September 11 terrorist attacks. The shuttering of the Ford auto assembly plant in Atlanta and the weak performance by GM, Saturn, and Nissan have led us to cut District auto production. However, on net, the strong performance by Mercedes, Honda, and

Hyundai has been more than enough to keep overall auto production in the District moving along at a relatively solid clip.

Along the Gulf Coast, much uncertainty remains about the long-term economic recovery of New Orleans. One hope for a signal of recovery was the restarting of the Crescent City's tourism and convention business. Unfortunately, indicators such as airport traffic and convention bookings have not strengthened over the year and remain well below pre-storm levels. In contrast, a key Mississippi Coast economic engine is up and running—the casinos. [Laughter] All the casinos damaged or destroyed by Katrina have reopened, and gaming revenues have returned to pre-storm levels, in some cases even above those levels. This signal has generated optimism about the eventual recovery of the Mississippi Coast.

Putting aside the problems of accurately calibrating growth in real GDP for the national economy that were discussed in the Greenbook, it seems clear that the slowing of the economy that many of us noted last meeting continues. At the same time, some of the pressures on the inflation side may be abating as well. Housing and its potential spillover effects to other segments of the economy remain a question mark, as does the slowing in manufacturing that now appears to be in progress. However, several factors suggest that the slowdown is transitory and that the risk is relatively small that it will turn into a full-fledged recession. For example, corporate profits remain healthy. Business investment has continued to expand, although a bit more slowly. The most recent labor report is quite positive, with job growth now averaging about 138,000 over the past three months. Going forward, the decline of the dollar suggests that net exports will be less of a drag on our output. This conclusion about the likely path of the economy is also consistent with our own District model forecasts that have changed only slightly from October. They have shifted in almost the same way that the Greenbook forecast has, and

the differences are relatively small when all things are considered. Let me stop and save my other comments for the policy go-round.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Two or three developments in the District economy are worth noting, and they seem consistent, by the way, with what's happening at the national level. First, overall, the labor markets, excluding construction, appear to be continuing to improve. Hiring is expanding, and the availability of jobs appears to be growing. Some of that growth is no doubt seasonal, but my impression is that it goes beyond the typical seasonal increase of this time of year. Second, housing sales of both new and existing homes appear to be stabilizing in year-over-year comparisons. That is clearly a favorable development. However, I think the adjustment in residential construction activity likely still has some considerable distance to go. Numerous projects are under way; many of them are in midstream. So the inventory of unsold homes, particularly of condominiums, is likely to remain high for the foreseeable future, and I think the implication is that no sizable new projects will be getting under way any time soon.

As far as the national economy is concerned, I agree with the pattern in the Greenbook of gradually improving growth in economic activity after the current and perhaps the next quarter. But I continue to expect such growth to be a bit higher than expressed in the Greenbook for the reasons I've cited recently—sustained gains in employment, rising equity values, lower energy prices, moderate interest rates, and overall generally sound financial conditions. Similarly, I wouldn't quarrel very much with the Greenbook trajectory as far as it pertains to core inflation. I think that, if this outlook is achieved, the outcome would not be at all bad, particularly if inflation diminishes a bit more quickly than it does in the forecast. Unfortunately it's hard at the

moment to see the precursors of such a development, and the lower dollar is not likely to help. However, I'm not alarmed by the unemployment rate at 4½ percent, and I wonder if we're getting another test of the ex-ante value of the NAIRU in forecasting inflation. [Laughter]

As to the risks to economic growth, some of the recent data, although not those pertaining to the labor market, have been on the soft side relative to my expectation. The persistent inversion of the Treasury yield curve has my attention as well, perhaps belatedly. But it's hard to know with any confidence what to make of the latter factor, given hypotheses about saving gluts, asset shortages, and so forth. Moreover, other approaches beyond analysis of the yield curve to estimate the probability of recessions generally provide figures that are quite low. The underlying resilience of the economy adds to my confidence that business activity is likely to improve rather than deteriorate from here. I would add that I am not hearing any of the negative anecdotes that I heard in late 2000 before the onset of the 2001 recession. Thank you.

CHAIRMAN BERNANKE. Thank you. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. Our forecast hasn't changed much since the last meeting. We still expect growth to move back to potential in the first half of next year and to stay in the vicinity of potential, which we think is around 3 percent, over the forecast period. We expect inflation, as measured by the core PCE index, to fall to just under 2 percent by the end of '08.

Our view of the outlook differs from the Greenbook in two respects, as it has over the past few cycles. We have a higher estimate of potential growth, with the difference due to higher estimates of labor force growth, and we expect more moderation in inflation than the Greenbook does, principally because we believe there is less inertia, less persistence in inflation in the United States than does the staff. Both these issues, of course, deserve continued analysis and



attention by the Committee. These differences in our forecast relative to the Greenbook don't extend to the policy assumption. Both outlooks are predicated on a likely path of the fed funds rate that's nearly flat over the next several quarters. This path, of course, is above the one currently reflected in financial markets. Of course, although some disagreement between our view and the market's view is not unusual, the size of this gap is significant enough to warrant some attention. It's hard to know, however, what the source of the difference is and, therefore, what the implications are for what we do in terms of policy.

The risks to the forecast may have shifted somewhat in the direction of less upside risk to inflation and more downside risk to growth. But to us, the current weakness in the economy still seems principally to stem from the direct effects of the slowdown in housing on construction activity and related parts of the manufacturing sector as well as from the reduction in automobile and auto-related production. As things now stand, the softer-than-expected recent numbers don't argue, in our view, for a substantial reassessment of the risks in the outlook. Surveys of business sentiment outside the manufacturing sector still seem consistent with reasonable growth going forward. A slowdown of investment in equipment and software doesn't seem to be particularly troubling to us at this point. Consumer spending seems to be growing at a fairly good pace. Employment growth, of course, is still quite solid, and growth outside the United States still looks pretty good.

We think the fundamentals of the expansion going forward still look good, with strong household income growth even after the lagged effects of the recent downward revisions, productivity growth in the range of 2½ percent for the nonfinancial corporate sector, and strong corporate balance sheets in the United States, and prospects for continued expansion outside the United States. Our recent financial market data don't, in my view, provide a convincing case for

a substantial increase in the probability of a much weaker path for growth going forward.

Although the yield curve is inverted and long rates continue to drift down, staff research and other indicators suggest that part of that is due to a decline in term premiums, and forward rates seem to be coming down around the world still. This gradual reduction in term premiums and forward real rates globally suggests that what we're seeing in the long-term interest rates in the United States may not be principally a sign that confidence in the U.S. growth outlook has deteriorated.

It's not clear even 18 months after the conundrum first emerged whether equilibrium rates globally have really moved substantially lower. The Bluebook estimate suggests we're still within most estimates of equilibrium real rates in the United States. Equity prices and credit spreads are consistent with the view of sustained expansion going forward. All this seems to reinforce the case for the judgment that we have not yet induced overly restrictive financial conditions.

We still face considerable uncertainty about the outlook for growth and the familiar sources of downside risk, but to us these still seem to rest mainly with the possibility that a more-acute and protracted fall in housing activity and prices will cause a significant deceleration in housing and household spending and ultimately business spending. The nature of these risks, however, hasn't changed in our view, and the probability that the risks will materialize may have risen a bit but not much. On balance, this situation should reduce the probability that we'll have to tighten further, but it doesn't seem to suggest that today we need to induce a further easing in overall financial conditions.

On the inflation front, we confront the familiar mix of underlying inflation still at uncomfortably high levels and considerable uncertainty about whether we'll see enough

moderation soon enough to keep expectations stable at reasonable levels. The remaining inflation risks, in other words, are about whether we get enough moderation. In the absence of a dramatically different outcome for the dollar and energy prices than what's in the forecast, we don't see much risk of inflation accelerating from current levels or remaining stuck at current levels. We haven't had much evidence to justify a significant change in the expected path of inflation or in the risks of that forecast. The news on unit labor costs may be a bit reassuring. Surveys seem to suggest some evidence of diminishing pricing power, which might imply that margins will adjust downward to absorb future rises in labor compensation. The odds of an early return to above-trend growth seem to have receded a bit. Most of the alternative measures of underlying inflation that many of us look at seem to have moderated a bit after the sustained earlier period of acceleration. Inflation expectations derived from TIPS have eased a bit. These pieces of information are somewhat comforting, but they don't change the fact that our expectation that we'll achieve the desired moderation in inflation without further tightening of monetary policy remains just that. It is an expectation or a hope; it is not yet reality. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. As many of you have remarked, the incoming data on spending at least have been consistent with our basic outlook for economic activity. Weakness in housing and autos will hold activity to below the growth rate of potential for a few quarters but with limited spillover to other forms of household spending. As inventory overhangs in these two sectors are dealt with, growth will return to something like the growth rate of potential. From some perspectives, the recent data have actually suggested diminished downside risk to the story. Stabilizing house sales, recovering mortgage applications, and improving consumer attitudes toward home purchases may be the signs of a housing market

beginning to find a bottom. The expected downward path of prices in the Case-Shiller index futures market has actually been revised higher over the intermeeting period; it is still sloping down but not as much. Auto producers have held production steady in the fourth quarter and announced a small increase in production for the first quarter. Moreover, consumption outside autos has remained on a healthy track.

Now, the downside risks in these areas may be smaller, but they certainly haven't been eliminated. The Greenbook projection has starts stabilizing at the current level, but we have yet to see hard evidence of that stability. The last data point was a substantial decline that was larger than we expected. Inventory overhangs in the housing sector are large and will be worked down fairly slowly in the staff forecast. Heads of households may be just coming to the realization that their kids' tuition and their retirement will not be taken care of by further outsized increases in the value of their homes.

A bit more troubling than the housing and consumption data—and perhaps indicative of other sources of downside risk—have been the rise in inventories and the softness in manufacturing production outside the auto and construction-related sectors. Much of the downward revision to private final demand from the last Greenbook to this one, taking into account both the third and the fourth quarters, was in business fixed investment, and it occurred when profits remained robust and sales—excluding autos and residential housing—strong. Evidence of broader weakness in the manufacturing sector seemed to account for at least a portion of the reaction of the financial markets over the intermeeting period.

There are a number of reasons to think that this weakness is limited. The underlying economy remains in good shape. Commodity prices have continued to climb, probably partly reflecting the weaker dollar but also indicative of underlying strength in global demand. Firms

are adding to payrolls in a way they wouldn't if they were sensing the possibility of softness spreading outside manufacturing. Equity prices and risk spreads suggest expectations of continued good growth, even if in the eyes of investors it might take some easing of policy to produce that outcome. As President Stern noted, anecdotes—as reflected in the Beige Book and what we've heard from visitors, including the Reserve Bank chairs and vice chairs who were here very recently—suggest that businesses are experiencing and expect continued good business conditions. These anecdotes very markedly contrast to the fall of 2000, when by November the tone of the feedback from businesses had turned decidedly gloomier.

The Committee has been focused on housing and consumption, but the recent data and the financial market's response may suggest the possibility that something else could be going on. Perhaps the removal of policy accommodation has affected other forms of spending more than we had anticipated. I think that the basic story of growth strengthening to potential over the next year remains valid and that it will be strong enough to withstand a rise in longer-term interest rates that would accompany a flat fed funds rate as in the Greenbook. Moreover, the overall downside risks to that forecast probably haven't increased very much, but they may have changed source or character. We will need to be alert to possible sources of weakness that we hadn't anticipated.

With regard to the inflation outlook, I, like the staff, have characterized the incoming data as leaving expectations for a very gradual decline in inflation intact, if the economy follows something like the Greenbook path. To be sure, core PCE inflation did not ease back, but the CPI did quite a bit. Labor cost pressures appear to be less than we had previously estimated, and various measures of long-term inflation expectations remain within their ranges of the past several years.

My presumption, like that of the staff, is that at some point lagging spending growth will be reflected in labor markets and will help to remove inflation pressures. But for now, the risks around the expected downward trend in inflation remain skewed to the upside. Unit labor costs are still accelerating, although not as much as we thought they were, and businesses won't readily absorb higher costs and reduced profit margins. The unemployment rate remains low. The index of capacity utilization in manufacturing continues to be above its long-term average, suggesting continued pressures in resource markets and, by extension, in markets for goods and services, which will contribute both to higher costs and to the ability of businesses to pass them on. The forecast path to inflation is sufficiently gradual that upward deviations from it could entail outsized costs in terms of embedding another notch up in underlying inflation and inflation expectations. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I thought I'd start today talking a bit about housing markets and the condition of banks right now. As many of you have noticed, some of us are optimistic that we may be approaching a bottom in the housing market. I think we'll see that bottom in housing sales long before we see it on the construction side because there's a large amount of inventory still to work through. But as we've noted, the applications for purchasing mortgages have been level since midyear. The growth in mortgage credit has slowed significantly from where it was in the past two years, dropping to only 10 percent growth this past quarter, a growth rate that is significantly above the growth of personal income and that most of us in the past would have considered to be alarming.

Part of what's amazing in all of this is that in 2004 and 2006, particularly toward the end of that period, purchase money seconds, by which people borrowed the downpayments for

homes, were a big part of mortgage financing. Banks are still getting some of this business and putting it on their balance sheets, and it is part of the growth of what you're seeing the banks funding. But it is at a pace that I think needs to be adjusted. I'm saying that, although the number of applications may have bottomed out, the amount of leverage in each housing deal may still need some correction going forward, and so we may see some slowdown in the volume of dollars that are funded through mortgage lending.

Delinquency rates are really, really low by historical standards. The one sector that has had a jump in delinquencies is subprime ARMs, and clearly the jump is related to rates that have already reset. We've got more to come. Even though these have jumped, they're still not at alarming levels. But it's something that I think the banks are watching very, very carefully.

One thing I'm hearing more from some folks who have been investing in mortgage-backed securities and maybe in some CDOs (collateralized debt obligations), where they've been tranced into riskier positions through economic leverage, is the realization that a lot of the private mortgages that have been securitized during the past few years really do have much more risk than the investors have been focusing on. I'm hearing this from folks who understand that the quality of what goes into those pools varies tremendously when you don't have the Fannie Mae and Freddie Mac framework for the underwriting. When a mortgage is originated through a bank, we do a lot through safety and soundness supervision to make sure, if a bank is buying loans from brokers, that the loans are underwritten in a sound manner and are therefore affordable to the borrower when they're undertaken. We're seeing that some of the private-label mortgage-backed securities are having very high early default rates or delinquencies in the mortgages, which usually means that the originator has to buy them back out of the pools. There isn't a whole lot of transparency in the disclosures around some of these bonds, and some of the

brokers are underwriting products that have very high early default rates, which is something that investors are starting to focus on. As more products are generated outside the banking sector, they get funneled to pools through broker-dealers as opposed to the banks. I think that we're missing a level of due diligence regarding brokers, who may not be doing a good job. As you all know, the fraud rate on mortgages has tripled in the past two years. So I think we could see noise in some of the mortgage-backed private deals and some of the riskier CDO economic leverage positions.

Bank earnings are really, really strong overall, especially by historical standards. Banks are making a lot of layoffs connected with the mortgage business. They are taking steps to get costs—whether related to originations, post-loan closings, or payoff administration—under control. Net interest margins, however, continue to be under significant pressure. I'm hearing more from banks that, since we've stopped raising rates, they've lost the nice little lag effect—the ability to wait for us to move before lagging along. In other words, they have lost that lagniappe in their liability cost that has helped them with their margin pressures. So those pressures are going to be more of a challenge for them, especially with a flat or inverted yield curve, depending on where they're funding and lending. Loan-loss provision continues to be the best in many, many years. No one really expects it to jump, but clearly it can't get a whole lot better than it is, and so that will also present challenges going forward.

As for the economy as a whole, I, too, want to compliment President Yellen because I think she did a fantastic job of helping us think about the different signals we're getting. When I looked again at the graph that I love in the Greenbook that shows where our forecast has been, I was struck that we've seen the forecast of GDP growth continuing to moderate in the past several months but our expectations of inflation are actually flat to up a bit. To me that raises questions



about the tradeoff that we really have when we are running below capacity and below potential growth rates. The bit of softness that I'm hearing about from some of my contacts in sectors outside housing and mortgages warns me that we need to be a little more vigilant than I had been expecting about growth maybe softening in a broader sense. But the fact that inflation continues to be above 2 percent in the forecast period is something that does concern me, and I think part of my concern relates to the tremendous amount of liquidity that sits out there in the banking sector, in the U.S. financial markets, and clearly globally. The presence of this liquidity is something that we really need to think about. It's not back to where it was in my money supply days, when I started my career at the St. Louis Fed; but I do worry that liquidity is, as some of you have said, causing a lot of transactions to occur that economically perhaps wouldn't otherwise occur. That is also something we need to watch very carefully.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me confine my remarks to a couple of discussions of the economy that bolster the themes that several of you have noted. At the outset, I'll say that I continue to be more concerned with the level of inflation and our progress regarding it than I am with growth. The economy appears to be on track, and I think, unlike the Greenbook projections, that there's a prospect for some upside surprises on growth. So let me spend a few moments looking at the labor markets, the corporate profit markets, household balance sheets, and consumer spending before coming back to the capital markets a little more broadly.

First, on the labor market side, as has been noted previously, we continue to have surprisingly strong job gains, particularly at this point in the cycle. The trend on revisions, regardless of the data series, tends to be continuing upward. The labor markets continue to

accept new workers into the labor force more smoothly, with the participation rate the highest since 2003, which suggests a dynamism in that market. Hiring plans of small businesses have moved to their highest level in nearly two years and tend to be a pretty good forward-looking indicator, perhaps a better indicator than large companies. In light of all that, I think the Greenbook rightly acknowledges that the household survey may imply even greater strength than the payroll data suggest.

Second, turning to the profits picture, there continue to be remarkable profits for the S&P, the Dow, and the broader markets, predicated on strong cash flows and record profit margins. Broad-based NIPA profits are up 30 percent pre-tax for the third quarter. S&P delivered 20 percent profit gains in the third quarter. I think the trend there is particularly telling. That is, estimates by earnings analysts continue to surprise on the upside. As we move through the quarter, those bottom-up estimates continue to track very, very positively. I think that's probably a good indication of why we've seen equity prices increase. When we look at where estimates are for the fourth quarter, bottom-up estimates for the S&P 500 are at about 9.1 percent. For 2007, year-over-year increases of about 9.3 percent are expected. These numbers are very strong, but they are significantly down from the high double-digit numbers that we've seen over the past couple of quarters. My own sense is that continues to suggest good news for the equity markets and good news for corporate profits. I expect that equity prices will outperform over the next couple of months if the numbers move up from 9 percent into the double digits. If that trend is reversed and we see disappointing corporate earnings, we could see a pretty rapid pullback in the equity markets, with some implications for the broader economy. I mention this discussion of profits and recognize that, though there is some correlation between

corporate profits and the broader economy, we are continuing to see a disproportionate share of total income coming from this sector. So it's a sector that we need to continue to evaluate.

Third, turning to household balance sheets, net worth grew \$3½ trillion over the past four quarters, as the Fed's flow of funds data suggest. Assets are growing faster than liabilities, whether we include or exclude housing, if we look at just the past four quarters. Continuing remarkable levels of household and corporate liquidity continue to suggest very good news. Although in these data we do see growth of household debt relative to income, this is a trend over the past twenty-five years, and I don't really note anything overly disturbing there. So when we look at those three measures—labor, profits, and balance sheets—I come to a pretty encouraging conclusion in terms of an underlying sturdiness to the economy, particularly in regard to individual consumption.

Let me turn to consumption, with a bit of a short-term focus here on the fourth quarter. I think the Greenbook suggested anecdotally that November might turn out to be a little softer than October and a little softer than expectations. My own sense is that some real upside surprises are there. I had discussions with contacts and reviewed data from two large credit card companies, which in total represent about 35 percent of all of consumer buying over this period. This real-time information ends in November and looks across demographics. It excludes subprime lenders: The only subprime folks in these two portfolios are those who began in the primary market and found their way into the subprime market. So I recognize that we are missing an important piece. However, when you look at consumer spending for November, you see little to no deterioration in credit quality—credit is still incredibly strong across regions and income groups. I pushed each of the two companies to find areas of weakness, and they found this exercise to be pretty tough. Their own internal credit measures have not shifted. They had built

in some softening in November and December Christmas spending, which they have not seen. They continue to see a huge reservoir of untapped credit, and they do see some de-leveraging by folks in key consumer groups, which they think suggests that consumers are in very good shape. The consumer spending trend from these two contacts continues to be very positive. They expected to see growth in November on the order of 4 percent; they saw growth of 5½ and 6 percent. Though it's too early to call this Christmas season a success, they are much more positive than they were before November began, in terms of both dollar purchases and transaction swipes. So my own sense is that the consumer appears to be quite strong.

Having now listed four areas that I think have rather remarkable strength, I want to spend a moment on another topic that has been discussed around this table, which is manufacturing. As we look at the manufacturing base and we try to evaluate how we will know which inflection point the economy turns on, the manufacturing data are likely to be quite telling. I've been surprised and disappointed by poor manufacturing ISM (Institute for Supply Management) data and other weak data, and I've asked myself whether the weakness shows some spreading beyond autos and housing, which we've all discussed for some time. When I look behind those data, I am comfortable that much of the weakness that we see in manufacturing really is consistent with that theme—that is, second-order and third-order suppliers into the auto and housing sectors. Other weakness does appear to be related to certain machinery and equipment, but I have seen that weakness more in the data than in the anecdotes. As President Minehan suggested, I think that these data end up being somewhat weak, but the weakness is transitory. The share prices of most of these large multinational manufacturing companies continue to outperform. The tone that these companies have when they're meeting with their analysts continues to be quite positive, so this signal may well be false, but we have to focus a bit more on it. By the time we

meet in the first quarter we'll have a better sense of whether the manufacturing base, in terms of volume and productivity, is giving us any indication of what's happening in the broader economy.

Let me turn, finally, to the capital markets. Capital markets, as has been mentioned around this table, continue to function well. The Board staff has rightly observed that long-term forward corporate credit spreads are widening somewhat, showing that these markets, while awash in liquidity, are responding to price signals and are starting to focus increasingly on credit. In a couple of instances, issuers that tried to come to market, both in Europe and in the United States, were beaten back, which was, frankly, good news from the perspective of market discipline. The securities that they were trying to issue were PIK notes. These are paid-in-kind securities by which the company can pay off the investors either in cash or through additional paper, and the pool of liquidity for such notes is not so deep. That kind of discipline in the markets should encourage us. Having said that, I consider the debt capital markets to be incredibly robust. I talked previously about remarkable pipelines that were at record levels. They have all now priced at significantly beneficial terms. In November, as I think Dino noted, high-yield corporate issuances were at a record. The leveraged-loan market was also at a record, and we found instances in which issuers obtained better terms by issuing in larger volumes. That tells us that some people in the investor base really want to get their full allocations. If they can get their allocations, they're willing to pay a premium for doing so. The backlogs priced remarkably well, and I think those markets are functioning well.

Let me enter the discussion about trying to reconcile the bond markets and the equity markets by making four points. First, the leveraged buyout data that Dino discussed are one explanation. That is, you don't need to have a leveraged buyout of a vast majority or of even a

significant number of companies in the S&P for those values to find their way into the markets. My view is that an LBO floor valuation now exists across more sectors than we could have anticipated before—into technology, for example—and companies that, because of their size, were previously out of reach for the private equity players. Part of the growth that we've seen in the equity markets has occurred because the LBO prices that could theoretically be paid, with balance sheets that are probably much less conservative, have raised the prices that are paid in the capital markets for these same companies. Second, the difference between the equity and the bond markets is about earnings growth and not multiples growth. On a price-to-earnings basis, the suggestion is that earnings in 2007 will be up something like 9 percent over this year, and the price-earnings multiples don't look out of whack. You end up with earnings that, if they are delivered for another year or two, don't make these companies look all that expensive. Third, in reconciling these markets, I'd suggest that the difference is really about us. The markets think that, if the trajectory for the economy softens significantly, the Fed will be responsive to it, notwithstanding what we're saying currently—that dependence on the data means that we will be agile and we won't be stuck in our words of yesterday in judging the economy that's forthcoming. So they believe that we will effectively lower rates to achieve a very soft but successful landing. Finally, expectations are built into the bond markets that rate cuts are ahead. The discount rate in evaluating cash flows for these companies obviously comes down as well, further bolstering their value. So I suspect that these markets are perhaps a bit more consistent than some market prognosticators would say. But we must continue to evaluate them over the next several weeks and months. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Governor Warsh, I'm going to put you on the spot. You and many others have talked about the liquidity in the market, and I want to understand better

what that means. First, liquidity can refer to the availability of buyers and sellers; clearly, that has increased over the past years as we've had hedge funds and other actors increasing their activity. That simply makes markets more efficient and lowers the costs of trading. I don't think that's a bad thing, if that's what we're talking about. The second possibility refers to monetary aggregates, and we know that hasn't been a serious concern. Money growth has generally been pretty slow. A third possibility, which is the one that I subscribe to, is that the big demand for assets reflects the global saving glut, which means that there's an awful lot of money out there looking for returns that is coming from abroad and from high rates of saving relative to investment in other parts of the world. But if the saving glut is, in fact, a source of liquidity, then actually, as President Lacker I believe mentioned, the equilibrium rate should be lower, not higher, to be consistent with the real rate that clears the saving and investment market. So I was just wondering, what is your view about the meaning of this liquidity issue?

MR. WARSH. It's a tough question, and I'll try to take it in turn, which is that most of the liquidity phenomenon that I describe here and that we see in the U.S. markets, we describe in the FOMC as a U.S. phenomenon, but it's really a global phenomenon. So as we think about what this liquidity tells us about interest rates, it's hard to draw a certain conclusion. That is, these markets are increasingly global. The U.S. multinational financial companies that are successful in having access to capital in worldwide markets can take companies public in worldwide markets. So even if you believe that the Fed was too loose or overly accommodative, we're somewhat limited in what we can do to stem that worldwide liquidity for the reasons that you mentioned.

When I talk about liquidity, moreover, I'm suggesting partly the first explanation that you gave, which is that there is access to capital, which has been described around this table as free

money, by more people in more investments that might not otherwise be satisfying a strict return on investment or return on equity basis. So we're seeing not only smart capital from folks with long track records who have entered this market and can deploy their investment dollars but also folks with less experience who can finance themselves particularly in the debt markets in a way that was unimaginable in previous cycles. So I think liquidity really means a couple of the things you've noted. Obviously, I, like you, think that these monetary aggregates are not providing us with much insight. Moreover, regarding your initial point, we would have a hard time drying up this liquidity, if that's what we attempted to do, given the global nature of the sources and the uses of funds.

CHAIRMAN BERNANKE. Thank you. With apologies to Governors Kroszner and Mishkin, I think it's time to take coffee break. [Laughter] Let's take a fifteen-minute break, and then we'll come back.

[Coffee break]

CHAIRMAN BERNANKE. Let's reassemble. Governor Kroszner, if you're ready.

MR. KROSZNER. Last time several of us noted that there would be an avalanche of data between the last meeting and this one [laughter]—two employment reports, two rounds of ISM, GDP, ECI, compensation revisions, all of that. But it seems from the discussion here that we've actually gotten very little new information, with one exception, and that relates to Dave Stockton. We heard that not long ago he was on the psychiatrist's couch dealing with a schizophrenia issue of whether the economy is going up or going down. But now we know that he is on his death bed. [Laughter] I hope this does not bode ill for the economy going forward, but I did want to note that one very important change, Mr. Chairman.



We've had the same discussion of a two-tiered economy, with housing and autos being slower and the rest of the economy moving forward, and continuing concerns about the risk of spillovers; but the central tendency seems to be that we'll be moving ahead perhaps a little below potential, with some reasonable chance of getting back to something closer to potential by the end of next year. Continuing the discussions of labor market tightness and some concerns about shortages in certain areas, I think that we certainly have seen some softness in construction, but that's an area for which we've probably underestimated employment growth and perhaps employment falloff because, as I think many of us know, many of the subcontractors in residential as well as nonresidential housing have a lot of undocumented workers, and they tend to be undercounted both on the upside and on the downside. So there may be a little more softness in the labor market than we're seeing, at least in the construction sector; however, in the higher-skilled sectors, we're seeing continued tightness.

Consumer spending continues to be strong. There has been just an amazing persistence of consumer spending, no matter what has happened over the past five years. Whether the stock market has crashed, whether the housing market has boomed, whether we've had September 11, or whether we've had concerns about spillover effects, the consumer seems to have been very, very persistent, and it seems as though that's the case now. We've talked about challenges in the energy markets, and we did see a little slowing. Energy prices were higher, and energy prices are lower, but these aspects of the macroeconomy seem still to have little effect on consumer spending.

We continue to have concerns about some upside risks to inflation. So I'll just mention quickly a few issues and then talk about some international issues that Dino and Tim touched on earlier. Regarding housing, we know we have terrible price data, but it seems as though there's a

little more flexibility and nimbleness in the housing market than there was in the past. So the past data on housing may not be too useful. Although we know we don't get good data on effective prices, we do seem to be seeing more evidence that people, rather than just holding things on the market longer, are providing the marble bathroom, the Lexus, the Hyundai, the Kia, the Yugo, or whatever they're providing. In New Jersey, where I grew up, it would be a Yugo. [Laughter] So I think there's more flexibility on that side. Also, because of the way the housing market has developed, a lot of residential construction is no longer at just the local level. The large national builders are better diversified and, as has been discussed, have options on land, and then, if they see the market turning down, they give up those options. So they have a much greater ability to shift both down and up in production much more quickly. Prices, too, are a little more flexible, which is one reason that we've seen a sharper correction in the housing market. But that flexibility, with the recent data indicating that certain things may be flattening out, may mean that, though the correction may have been sharper, it won't necessarily persist—that the correction has occurred in a shorter time, rather than being dragged out longer and having more potential for negative spillover, confidence effects, and so forth.

Well, what has changed? As Governor Kohn mentioned, inventory accumulation is a bit of concern: It seems to be ticking up. It always seems a bit odd when a positive effect on GDP results from businesses being unable to sell the things that they've purchased. That doesn't strike me as necessarily a positive thing for a GDP report. We've gotten some more, probably confusing, numbers on productivity. Is productivity slowing or not? We are getting some data that may be suggesting that it is, although I would agree with Dave and the staff that it's much too early to say. I think the evidence both anecdotally, as a number of people have mentioned, and more broadly is that productivity is likely to continue to go forward. Another thing that

changed, as Dino and others discussed, was the yield curve. But this phenomenon is very much an international one. Long rates have come down more—since the last meeting, they have fallen a fair amount and not just in the United States. The three-month versus the ten-year in Europe has fallen about 40 basis points, so the spread is about 7 basis points now. On average, since the euro has been around, it has been about 40 to 50 basis points. In the United Kingdom, which tends on average to have very flat yield curves, the inversion has steepened about 25 basis points to 65 basis points. Japan is little changed, but Japan is *sui generis*. Emerging markets have also seen this. In Mexico, for example, the ten-year versus the three-month has dropped about 60 basis points. Clearly, this is not just a U.S. phenomenon, and I think it's telling us not just about U.S. growth, unless you think that U.S. growth is driving world growth and so it's really all about the United States. I think that's a bit extreme, even though, as was mentioned, some correlations suggest that when the United States goes down, there is a lagged effect and the rest of the world tends to go down. But I think it's suggesting that some other factor is occurring and that we shouldn't read too much into it. Also, interestingly, if you look at the real short and long rates around the world—at least for the industrial countries—real rates tend to be about 1½ to 2½ percent, which is very much where we are. Thus there has been a convergence of real rates around the world. So I would be wary of taking too much information from the bond market as referring to something that's specific to the United States rather than to some factors that are common worldwide.

Just quickly on inflation—we've talked about how energy prices have gone up and down but core inflation hasn't been affected that much. Labor market tightness doesn't seem to have had much of an effect. As for output gaps—if you like output gaps—when you look at the data, it's hard to find much evidence of an effect of output gaps on core inflation. Also, given the

discussion that we've had, it doesn't seem that the gap will be too wide or, even if you believe it will be wide, that you'd be getting much effect from it in the near term. We talked about some temporary factors like owners' equivalent rent that may have boosted measured inflation for a while and is now coming down. I don't think there will be much effect on inflation from the dollar. The United States still is just not that open an economy. Even to the extent that it is open, the pass-through of exchange rate changes to domestic prices is very slow and very partial—typically, over a three-year to five-year period, barely 50 percent. The evidence suggests that the pass-through is decreasing. Even if the dollar went down further, I don't see much of an effect there. That said, it's hard to see exactly what forces are moving inflation in one way or another right now. A reasonable scenario is that it could drift down slowly, but it's hard to point to clear evidence of where it's going to go. To the extent that there is information in the yield curve, the markets clearly do not expect inflation to take off, and it's likely that inflation will be moving lower or at least staying contained where it is. So we have much data and relatively little information. I see risks on both the upside and the downside to growth and have continuing concern about upside risks to inflation precisely because I don't see an easy path to lower core inflation going forward. I think that lower core inflation in the future is reasonable but uncertain, particularly given that it's hard to see a lot of systematic evidence of factors that are occurring now that would be correlated with that result. Thanks.

CHAIRMAN BERNANKE. Governor Mishkin.

MR. MISHKIN. Thanks, Mr. Chairman. I see the economy evolving very much along the lines of the past couple of Greenbooks, particularly the ones since I've been here. The staff is to be very highly commended: They pointed out that outcomes were going to be weaker than other forecasters thought, and they really did get it right. Now, I have promised Dave that I

wouldn't jump on him when they get it wrong, and today I'll be nice in the other direction. I think their forecast has been very useful in terms of the numbers.

In fact, I think we're seeing the economy evolve very much along the lines that we discussed at the past couple of meetings. There really is not all that much new. I think there's a smidgen more weakness on the real side, but it doesn't alter my basic view that the economy is evolving along the lines of having slightly below potential GDP growth. I don't see any indications that we will have big spillovers into other sectors from weak housing and motor vehicles. In that sense, there's a slight concern about a little weakness, but the right word is I guess a "smidgen," not a whole lot.

I see that inflation pressures are also very similar to what they were at the time of our last meeting. Inflation is likely to decelerate to somewhere around 2½ percent in the core CPI and 2 percent in the core PCE. Part of the reason I believe those numbers is that the nature of the output paths we've talked about is consistent with them, but I also think that we have anchored inflation expectations around those levels. I don't like to use the word "persistence" the way other people do. I think of mean reversion to expected inflation—and very likely that's where inflation will be heading, given the paths that we see in terms of the economy and the forecast from the Greenbook. I see the risks to forecast inflation as fairly balanced. The good news is that compensation is not as scary as it was. But the bad news is that the labor markets are very tight, and we're just not quite sure what the implications of that are going to be. So my view is that we have a bit greater uncertainty, not a whole lot, so that we need to be very vigilant on inflation because it is too high, labor markets are tight, and there is still some question about how quick the mean reversion to expected inflation will be. We also need to be vigilant about real

output. There is a bit more certain information coming in, so I think we have to watch both inflation and output.

The last thing to mention is the yield curve. I did some of the research on yield curves in recessions, and I do not think that the yield curve is providing much information at this time, exactly for the reasons that Governor Kroszner and others have discussed. I think there are special reasons that the term premium is extremely low. There is always that nice little table of the yield curve and recession probabilities, but you notice that I haven't mentioned it, and I'm not going to mention it in the future. [Laughter] Thank you very much.

CHAIRMAN BERNANKE. Thank you. Let me just summarize and add a few comments. As Governor Kroszner mentioned, we had an avalanche of data, and the snowman is still standing in the same place as before. [Laughter]

Most people still see a two-track or bimodal economy. In the first part of the economy—the goods economy, housing and manufacturing—there seems to be some softening since the last meeting but not a large change. Housing remains the center of the weakness. There are some indications that demand for housing may be stabilizing, but a few people noted that there are probably still some downside risks in that sector. Manufacturing is also becoming a bit softer, partly but not entirely linked to housing. Automobiles, too, have softened, and a few other areas as well, as I'll discuss later. One interesting point was that, where the aggregate data show some decline in growth in commercial real estate and the Greenbook seconds that conclusion, the anecdotes do not seem all that consistent with it. The second part of the economy, which is focused primarily on services, remains quite strong, particularly in sustaining a robust labor market with good income growth. Together with lower energy prices, those factors are leading to well-sustained consumption, which is continuing to drive the economy forward. A few people

mentioned balance sheet issues for the consumer, but the references to balance sheets were both negative and positive.

Looking forward, again to compliment the staff, I think most people around the table accepted the general contour of the Greenbook forecast—that is, moderate growth perhaps below potential for the next few quarters but returning to potential growth later next year, with risks to the upside as well as to the downside. So far there is little evidence of spillover into consumption in particular, although obviously we have to keep an eye on that. There are a number of strong underlying conditions, including supportive financial conditions, strong profits, and a strong international economy, which are providing a cushion to the economy.

On inflation, I have to say there wasn't much change in view. Most of you still expect a gradual decline in inflation. Others are concerned that we might get stuck at current levels. Even those who expect a gradual decline remain somewhat concerned about the pace of the decline. Some of the factors that may return inflation to lower levels are a slowing economy, well-contained inflation expectations, and the downward revisions to the wage data. Those who are more concerned about inflation cited the weakening dollar, accommodative financial conditions, and the expectation that growth will not be below potential for very long. So I think that some of these concerns and risk assessments do not seem markedly different from those at our last meeting.

Let me add just a few comments. These are all marginal because I think the broad outlines of the story and the risks are quite reasonable. First, I think I took a bit more weakness from the data in the first part of the economy than some people around the table. The Greenbook has single-family housing starts leveling out at current levels. They did fall 16 percent in October. We're not entirely sure that they will, in fact, stabilize. Multifamily construction

permits have been dropping: They're off about 30 percent since the first quarter. That had been a source of stability so far this year. There might be a bit less strength there. Then, nonresidential construction is an issue. The data, in terms of employment and construction put in place, suggest some slowing, and I do think that some slowing from the very strong pace of earlier this year is pretty much inevitable. But the sense of the Committee must be that we will have to wait a bit longer to judge how much that is going to slow. In manufacturing, obviously the strongest slowdowns are related to autos and housing. But if you look at employment and the ISM data, for example, you also see weakness in areas like machinery and electrical machinery, which suggests some possible weakness in equipment and software spending going forward. This remark does not represent a major difference with the Committee; I just saw a bit more weakness in the first area than some did.

At the same time, like many members of the Committee, I see a very strong labor market and a very strong services sector plus a very strong nonmanufacturing ISM, which, though it includes construction, was nevertheless still very strong. One begins to wonder a bit about the measurement of the services sector—whether or not we are understating growth and productivity in that sector. That's a question we'll need to continue to consider. So like most people around the table, I think that a soft landing with growth a bit below potential in the short run looks like the most likely scenario. I expect the unemployment rate to increase gradually but income growth and other factors to be sufficient to keep consumption above 2 percent, which is essentially what we need to keep the economy growing. Again, I see the risks going in both directions.

Let me add a couple of extra comments about risks in the housing market. I talked last time about the dynamics of starts. Even if final demand stabilizes, starts may take a time to fully



work out the inventories. A couple of other factors are like that, which I just would like to bring to your attention. One has to do with the very strong presumption we seem to have now that demand for housing has stabilized. That may be the case, but I would point out that we have seen a very sharp decline in mortgage rates. People may have a sort of mean-reverting model of mortgage rates in their minds. It could be they are looking at this as an opportunity to jump in and buy while the financial conditions are favorable. So even if rates stay low, we face some risk of a decline in demand. The counter argument to that, which I should bring up, is that if people thought that prices were going to fall much more, then they would be very reluctant to buy. That's evidence for stabilization of demand. Another point to make about housing is that, even when starts stabilize, there are going to be ongoing effects on GDP and employment. On the GDP side, it takes about six months on average to complete residential structures. Therefore, even when starts stabilize, we're going to continue to see declines in the contribution of residential construction to GDP.

On the employment side, I asked Bruce Fallick of the staff to run a regression of residential construction employment on residential single-family starts and to project forward what the employment results are going to be. According to this regression, if starts stabilize at the October level, as projected by the Greenbook, the job losses in that sector will actually continue to rise for the next two or three months and return to the November level of about 15,000 per month only by the middle of next year. There will be lagged employment effects from the housing sector and presumably from the associated manufacturing sectors, like appliances and furniture, which also tend to lag. So there will be some employment drag coming forward, and I think it's reasonable to think that unemployment rates will start to rise. But, again, this is about 15 percent of the economy as compared with 85 percent of the economy.

On inflation, I agree that the latest core PCE number was disappointing. I think perhaps it overstates the trend a bit, just as the core CPI number understates the trend a bit. I think there are still indications of a mild deceleration in prices, and most of the factors supporting that are coming into place, including the slowing of rents, the improved energy situation, some increase in slack, and expectations, which include a five-by-five-year expectation which has come down about 20 basis points since we stopped raising rates in August. So I think there are some bases to expect a gradual decline in inflation. I would note also that outside forecasters are a bit more optimistic about this than the Greenbook is. For example, the Blue Chip median forecast of core PCE inflation for next year is 0.2 percentage point lower than the Greenbook on a comparable basis.

I've talked before about owners' equivalent rent, which is a somewhat special category, and I've indicated that I think its slowing will contribute to slower inflation. In the interest of being even-handed, let me talk about a category that might go in the other direction, which is medical costs. Medical costs in the short run depend a great deal on government policy, Medicare reimbursement decisions, and the like. Therefore, only in the medium term will they respond to monetary policy. I think that's a source of risk. The twelve-month change in medical costs has been declining: It was 4.3 percent in 2003, 3.5 percent in 2004, 3.3 percent in 2005, and 2.9 percent so far this year. So that gradual decline in medical costs has been a positive in terms of inflation. But in the latest month, the number was 0.6 percent on a one-month basis, or more than 7 percent on an annualized basis. To the extent that we see some bounceback of medical costs, that's going to be another factor of concern in terms of inflation going forward. Again, however, I think that we have some reason to think that inflation will slow, but I don't

disagree with the very wide sentiment I hear around the table that the slowing is far from certain and that the risks are still to the upside on inflation.

Are there any comments on or questions about my summary? If not, let's go to Brian, who will introduce the policy discussion.

MR. MADIGAN.<sup>2</sup> Thanks, Mr. Chairman. I will be referring to the material that was distributed labeled "Material for FOMC Briefing on Monetary Policy Alternatives." Financial market conditions eased noticeably on balance over the intermeeting period. As shown in the top panels of exhibit 1, ten-year nominal Treasury yields dropped 30 basis points, the dollar declined nearly 2 percent, and equity prices rose more than 3 percent. As portrayed in the middle left-hand panel, the decline in Treasury yields seems to have been prompted in part by incoming spending and production data that were generally weaker than investors anticipated and inflation figures that were viewed as relatively benign. The labor market reports for October and November, however, came in at or above market expectations, interrupting the general downward trend in rates. As shown in the middle right-hand panel, inflation compensation was little changed for the next five years, after adjustment for carry effects, and was only a little lower for the subsequent five years. Thus, almost all the decline in nominal yields represented a drop in real rates.

The bottom left-hand panel indicates that one-year nominal forward rates at the two-year and three-year horizons dropped the most, but the decline in yields was spread across the forward rate curve. The fact that relatively near-term forward rates declined steeply seems consistent with an interpretation that investors marked down their views of the cyclical strength of the economy, but the considerable drop in far forward rates seems to suggest that investors believe that more-persistent factors are also at work. As shown to the right, however, primary dealers and Blue Chip forecasters revised down their forecasts for GDP growth over the five quarters ending late next year by only about  $\frac{1}{4}$  percentage point, and private forecasts of long-run or potential GDP were essentially unchanged, leaving unanswered questions about the source of the drop in rates.

As can be seen in the top left-hand panel of exhibit 2, our three-factor term-structure model attributes the decline in the ten-year Treasury yield over the intermeeting period primarily to lower term premiums, the green portion of the bars. Ten-year term premiums are estimated to have declined from 31 to 12 basis points, leaving them almost invisibly thin and around their record lows. Expected future rates over the next ten years, the blue portion of the bars, are estimated to have accounted for only 9 basis points of the decline. However, we have some doubts about this estimated decomposition, in part because a sizable drop in the term premium, which at least conceptually represents compensation for interest-rate risk, seems hard to square with measures of interest-rate uncertainty. As shown to the

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

right, implied volatilities on Treasury yields, the black line, have edged up in recent weeks, and uncertainty about the Eurodollar rate six months ahead, the red line, has risen quite noticeably. Also, as shown by the blue bars in the middle left-hand panel, the average individual uncertainty that primary dealers expressed about the stance of policy three meetings ahead has crept up since the summer.

In any case, both market participants and market economists on average anticipate that policy easing is not far off. As indicated in the middle right-hand panel, primary dealer economists expect that the federal funds rate will average 5.16 percent in the first quarter and 4.82 percent in the fourth quarter of 2007. Quotes on fed funds futures, the right-hand column, suggest that investors see an even steeper easing of policy, with the funds rate expected to drop about  $\frac{3}{4}$  percentage point over the next year. As shown by the red bars in the bottom left-hand panel, the downward shift of rate expectations over the intermeeting period has been accompanied by a greater leftward skew of the distribution. As noted in the bottom right-hand panel, dealers uniformly expect you to keep the federal funds rate unchanged today, and most anticipate little change to the wording of the statement apart from updating the characterization of the economic situation. A week ago, a minority expected a more significant softening of the statement, perhaps by referencing downside risks to growth or possibly even by describing the risks to growth and inflation as balanced; but informal reports suggest that some have backed off such expectations in view of Friday's employment report.

If Committee members see significant odds that the market expectation of a near-term easing of policy could prove warranted, they might wish to start adjusting the policy statement in that direction, as in the Bluebook's alternative A, discussed in the top left-hand panel of exhibit 3. While Committee members might remain concerned about the upside risks to inflation with an unchanged federal funds rate, they might also believe that the substantial slowing in the housing sector, relatively high inventories in some sectors, and the sluggishness of manufacturing mean that the downside risks to economic activity have increased and now roughly balance the upside risks to inflation. Such an increase in downside risks could be a result of the gradual weakening of the near-term outlook, particularly if members place some weight on the possibility of nonlinear effects as economic growth slows. Moreover, while we do not fully understand what investors are reacting to, policymakers may be concerned that the decline in market rates could be signaling a degree of economic weakness that we do not yet appreciate. Also, our estimated policy rule indicates that maintaining rates at their current level would be consistent with the Committee's past behavior.

On the other hand, the Committee might see the recent easing of financial conditions as one of several considerations tilting it toward alternative C. As noted in the top right-hand panel, financial markets evidently are imparting increased stimulus to aggregate demand even as labor market conditions have tightened further. Members may view that stimulus as unwarranted and undesirable if their view of economic fundamentals hasn't changed much and may believe that at least some of it

should be offset by a firmer stance of monetary policy. Moreover, while core inflation has edged lower by some measures, it may not be seen as convincingly on a downward trend. And even if the Committee does believe that inflation is gradually ebbing, it may be dissatisfied with the anticipated pace of that decline. These considerations may motivate the Committee to consider firming policy today.

However, the Committee might once again conclude that holding policy steady at this meeting is likely to be consistent with achieving its goals over time while perceiving that, if anything, modest additional firming may be required, as in alternative B. Although the Greenbook forecast for near-term activity has been marked down slightly, the medium-term outlook is essentially unchanged, and as illustrated in the middle left-hand panel, the real federal funds rate remains at the upper end of the range of model-based estimates of its short-run equilibrium and slightly above the Greenbook-consistent measure. In the Greenbook, maintaining the current stance of policy over the next two years produces economic growth a bit below that of potential in 2007 and core PCE inflation that edges down slowly to about 2 percent by 2008. While you would likely prefer stronger output growth and lower inflation, you might find the outcome projected in the Greenbook to represent both a plausible outcome and a reasonable balancing—given your dual objectives—of what is actually achievable in the circumstances. As noted previously, maintaining your stance for the near term would also be consistent with the Committee's past behavior, as captured in our estimated outcome-based policy rule. Similarly, as shown in the panel to the right, optimal control simulations based on the extended Greenbook projection and an inflation objective of 2 percent would call for holding the federal funds rate at its current level over the next several quarters before easing slightly.

While maintaining the current stance of policy, the Committee might believe that the risks remain tilted to the upside, as noted at the bottom of the exhibit. The unemployment rate is below most estimates of the NAIRU, suggesting that labor market strains could be putting upward pressure on prices, and the Committee may consequently be concerned that inflation may not decline as in the staff's outlook. Moreover, with core inflation recently running around  $2\frac{1}{4}$  to  $2\frac{1}{2}$  percent, somewhat above the preferred ranges cited by some of you, the Committee may continue to feel that risk-management considerations argue for an assessment that the risks remain tilted toward higher inflation, as in alternative B.

Table 1 as it appeared in the Bluebook is included as exhibit 4 for your reference. Under the formulation of alternative B shown in this table, the Committee would refer to the "substantial" cooling of the housing market, indicate that "the recent pace of growth appears to have been somewhat more subdued than anticipated," but still conclude that "the economy seems likely to expand at a moderate pace on balance over coming quarters." This alternative would retain paragraphs 3 and 4 as they appeared in the October statement. If you found that version of section 2 too broad, you might prefer the version of alternative B presented in exhibit 5, shown in seasonally appropriate colors. [Laughter] Under this formulation, in section 2 the

first sentence and the second clause of the second sentence would be identical to that presented in the Bluebook. However, the first clause of the second sentence would indicate that “some recent indicators of production and spending have been slightly weaker than anticipated.” This formulation may be seen as superior in that, first, it characterizes recent indicators without making a pronouncement about overall growth for the fourth quarter and, second, it suggests that not all economic indicators have been weak. Both the exhibit 4 and the exhibit 5 versions of alternative B seem broadly in line with market expectations. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Are there questions for Brian? President Lacker.

MR. LACKER. Brian, you reported the decline in measured term premiums, and yet in the panel next to that you noted that measures of volatility don't seem to have fallen. The term premium is, of course, a combination of volatility in the securities return and covariance with—let's call it “marginal utility” just for the sake of argument. Do your estimates give you information on whether that correlation with the expected variance of real outcomes has changed?

MR. MADIGAN. No, they really don't. The three-factor term structure model doesn't provide a breakdown; it doesn't allow us to distinguish between changes in risk perceptions and risk appetite. So there's no evidence from that score. You may be seeing some reflection of what's shown in the bottom left-hand panel with that pronounced downward skew to interest rates. If investors believe that bonds could prove to be a particularly good investment, given the possibility of economic weakness, they may actually demand a lower term premium because of the covariances that you referenced. But I think we need to do more work on that before we push hard on that analysis.

MR. LACKER. My second question is about the statement. Many market participants, as you noted, expect very little change in the tenor of the statement's characterization of the real economy. Do you believe that the markets would view the way alternative B was originally

crafted as expressing more concern than the median analyst about real weakness, and do you view exhibit 5 as expressing less concern—as a more moderated signal?

MR. MADIGAN. In that respect I actually don't see much distinction between 4 and 5. On the whole, my guess would be that it is not far from what the median market participant expects. Dino may have a comment on this.

MR. KOS. I think that's right. I think the median view would be that they're looking for some acknowledgement of the soft data that were mentioned earlier.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. I have two questions about the prisms you gave us for looking at the current stance of policy and the likely path of policy. Brian, in your comments on exhibit 3 you said that alternative A, as your last bullet says, "is consistent with estimated policy rules." Can you just elaborate on that? My quick reading of it suggests that, as long as our inflation objective is 2 percent, the range of policy rules that we look at basically will show the funds rate at or under the market path. If you have a different inflation objective, then we're at the middle of the distribution or maybe slightly under the plausible distribution. Am I reading that right?

MR. MADIGAN. Yes. In that comment I was referring specifically to our estimated policy rules, which are empirical renditions of the Committee's past behavior. If you have the Bluebook handy, in chart 7, right at the bottom under "Memo," two policy rules are referenced—the estimated outcome-based rule and the estimated forecast-based rule. Both of them show the federal funds rate in the vicinity of 5¼ percent. If you look at the top part of that panel, being careful to look at the corrected version that we sent around late last week, a number of those rules suggest somewhat higher federal funds rate paths. Of course, it depends on the inflation

objective. An important distinction between the upper and lower parts of that panel is that the lower part doesn't have any direct evidence on what the Committee's inflation objective is. So your question partly gets to what people would be expecting if they had a specific inflation objective in mind that is different from what is incorporated in the upper part of the panel.

VICE CHAIRMAN GEITHNER. My second question is about the Bluebook chart 5, which shows a range of alternative estimates of the equilibrium real federal funds rate over time. I want to come back to the Chairman's discussion about the saving glut and what it might mean for the way we think about monetary policy today. The bottom panel of that chart shows a substantial upward revision in most estimates of equilibrium over the period from '02 to '04 and shows us coming back to something close to our long-term averages. Is there an intuitive explanation for how you reconcile that chart with the preponderance of evidence out there, which the Chairman drew to the world's attention, that suggests you have a big increase in ex ante saving relative to perceived investment opportunities? Wouldn't that have produced, in at least some mix of these estimates, a sustained and substantial secular decline in estimates of current prevailing equilibrium?

MR. MADIGAN. I think the basic answer to that is "yes," but there are perhaps things going on here at a cyclical level and at a more structural level. Chairman Bernanke's hypothesis was more of a structural or a secular explanation of interest rates. What we're seeing in the upper panel of chart 5 obviously has important cyclical characteristics with, among other things, investment spending being depressed for quite a while in the aftermath of the bubble that apparently prevailed earlier.



VICE CHAIRMAN GEITHNER. Wouldn't you have expected to have come back to a point that was below past estimates of equilibrium over time? I know I'm confused about this.

[Laughter]

MR. KOHN. I think there's another offsetting thing that you can see in this chart, and that is trend productivity growth. If you look at the red band, you can see that it rose quite a bit in the late 1990s, when trend productivity growth rose. Now we're below the late '90s with approximately the same trend productivity growth but apparently much less investment demand relative to saving. I think the Chairman's point offsets the productivity.

VICE CHAIRMAN GEITHNER. One way to look at this, I guess, is to say that we just don't know much about what equilibrium is. [Laughter] It tends to move around a lot, and the bands are kind of fat.

MR. STOCKTON. They're inferred from a very simple model—very limited three-equation, five-equation type estimates. We have one that we derived from something as complicated as FRB/US, but the rest are just our looking at real interest rates and output gaps and trying to line them up. Thus many of the more structural explanations are only very loosely captured by these estimates.

MR. MADIGAN. One point to make in that regard is that, to the extent you take a very highly articulated model like FRB/US as a reasonable representation of the way the world works, it tells you that equilibrium real interest rates are determined by a broad range of factors. There is no real presumption that there is constant level to which it returns over time without considerations of those exogenous variables.

VICE CHAIRMAN GEITHNER. I have one final question in another direction. Would you expect to see significant changes in measured term premiums over short periods? You gave

us a bunch of reasons that you don't have much confidence in the model estimates, but would you ever want to attribute much to what looked like significant moves in short periods?

MR. MADIGAN. Unless you have some reason for thinking that market participants' uncertainty about future inflation pressures, spending, profits, and so forth or risk aversion tends to change rapidly, I would say "no."

CHAIRMAN BERNANKE. President Lacker has a question.

MR. LACKER. My recollection of the time series plots of these term-premium estimates from the original research is that they were fairly choppy on a short-term basis. So this doesn't seem wild and crazy.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. May I ask a question about language that applies to two alternatives, or do you want to wait on that?

CHAIRMAN BERNANKE. Go ahead.

MS. MINEHAN. Both alternative A and alternative B talk in section 2 about something happening that's greater than anticipated. I really have some trouble with the words "than anticipated"—anticipated by whom and about what? I recognize that the distinction between A and B and C is that C doesn't emphasize as much a diminution in the recent pace of growth. So that's fine. But if you take the words "more" and "than anticipated" out of both sentences, you could make the same point for each one. I'm not looking at the appropriate Christmas-colored adaptation of this. [Laughter]

CHAIRMAN BERNANKE. You're correct. Let me just put that on the table for people to comment on.

MS. MINEHAN. You could take out “than anticipated,” and if you’re looking at A, you could take out “more” because I think it says exactly what you want to do. It puts a little more emphasis on growth and on problems affecting growth, but it doesn’t raise issues about who anticipated what and when.

CHAIRMAN BERNANKE. That’s a perfectly fine point. I also just note that in exhibit 4, alternative B, the word “pace” appears in both phrases. If we decide on that particular language, I have a suggested rework that gets rid of “pace” and has the same meaning. But your substantive point about whether or not to include “than anticipated” should be on the floor for people to consider.

MS. MINEHAN. Great. That’s where I wanted to put it. Thank you.

CHAIRMAN BERNANKE. Are there other questions? President Pianalto.

MS. PIANALTO. Brian, in your comments you say obviously that dealers expect no change in the stance of policy today. Most expect little change to the wording. Yet their path for the fed funds rate is below what we see in the Greenbook. What information in your view would markets need to move their path closer to the Greenbook’s? What are they looking for?

MR. MADIGAN. Well, I assume just generally stronger real-side data—as the Committee has been discussing today, some firmer indication perhaps that the downturn in housing is leveling out and that overall the economy is growing at a solid pace.

MS. PIANALTO. As you point out, their economic forecasts are already much higher than ours. The Greenbook is one of the lowest in terms of economic outlook, even those among the Blue Chip forecasters.

CHAIRMAN BERNANKE. Some disconnect between the private forecasters, the economists, and the bond markets is evident. Even in their assumptions it’s quite explicit. So I

don't think those two things are necessarily inconsistent. Are we ready to begin our policy round? President Hoenig.

MR. HOENIG. My preference is, as we look at the outlook, to maintain the federal funds rate at 5¼ percent. In my judgment, Mr. Chairman, our current policy stance is slightly or moderately restrictive and will lead to moderation in inflation going forward, though slowly I admit. But I will also say, as indicated in my earlier statement, that I believe there are some upside risks to such moderating inflation. Therefore, I believe that we should maintain a slightly restrictive policy stance until we see core CPI inflation at 2 percent or lower. I would also say that my view of policy going forward is more asymmetric. If we get evidence that inflation is not moderating, I would be prepared to support additional tightening. On the other hand, it would take a prolonged period of below-trend growth with little sign of a return to trend or a much larger slowdown in growth to convince me that we should ease policy. On the press statement, I'm inclined toward saying less than we're saying now. I still think we ought to leave more to the minutes and say less in the statement. But having said that before and not getting very far, I would go with alternative B, more in line with some of the language that you and Cathy may work out here. Thanks.

CHAIRMAN BERNANKE. President Hoenig, do you prefer exhibit 4 or exhibit 5?

MR. HOENIG. You know, it's a tough call, but I think I'd go with exhibit 5 language.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, I spoke of my concern about the fattening of the tail in economic weakness and my continuing concern about the already fat tail of inflationary pressure. However, if I come around to the view of the staff and the view that seems to be expressed by many at this table—that growth is likely to return to its long-term potential in the forecast period,

inflation risks remain either at elevated levels or at less-elevated levels, and liquidity is somewhere in the range between healthy and ubiquitous [laughter]—then the first thing I do is decide that I wouldn't want to increase rates but I also wouldn't want to decrease them.

The question is how we express ourselves. Like President Hoenig—I don't want to take words out of his mouth—I'd be happy if we just included the opening policy decision and then the assessment-of-risk statement and took out much of the verbiage we have as a sort of Christmas surprise to the market, since they don't expect a whole lot. But I know that's not a serious proposal. Therefore, I come down on the side of alternative B, as amended by the Christmas colors. I'd take out the words "than anticipated"—I think President Minehan has a very good point—and the duplication of the word "pace" that you pointed out. I worry, because I cannot make an argument for decreasing the rate, about being careful that we don't signal to the market that we might be tending in that direction. Although I think alternative A not inaccurately expresses what's been said at this table, I worry that it may be sending the wrong signal. Therefore, I come down on the side, as President Hoenig does, of alternative B as amended by Cathy and the suggestion in the Christmas colors, even though I think the verbiage is excessive. I know that sounds odd coming from a Texan.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Thank you very much. My assessment of what's going on vis-à-vis our policy stance is that we're facing, as I think most people have acknowledged around the table, pretty much the same ideas that we were facing at the last meeting about the best baseline forecast going forward; but the risks on both sides have gotten a little deeper. On the growth side, the issues have to do with the depth of the housing market contraction, the spillover to motor vehicles, and the possible expansion of weakness to other sectors, particularly on the

goods manufacturing side. However, I would mention, though nobody else has around this table, that some of the slowness in high-tech spending seems to be related to people's waiting to buy new computers when the new software from Microsoft comes out. I think that perhaps a little window of optimism exists there; certainly, it seemed that way to our director who is in the semiconductor industry. You have some greater risks on the minus side, and you have all the risks that Brian talked about on the plus side—more-accommodative financial markets, a dollar that's declining, strength in labor markets, and an ebbing of core inflation that's still more of a possibility than a reality. But I see the risks on both these sides as not affecting where policy should be. I don't think the risks are unbalanced right now. They may have gotten a little deeper on both sides, but I don't see them as unbalanced. This policy stance is right, for now. I think it's at the high end of neutral and focused on where it's more expensive to be wrong and that is on the inflation side. If inflation fails to decelerate, if the promise is not realized, then obviously policy won't be slightly restrictive as it is now, and we'll have to tighten. If we see some of the bad signs on the growth side confirmed, then we'll either need to stay the course for a while, as President Hoenig has suggested, or possibly reduce rates along the lines of the market. But for right now, we're right where we need to be.

I'd go with alternative B. But I'd either go with the Christmas colors with "than anticipated" taken out, or as I am attracted to President Hoenig's idea, I'd go with fewer rather than more words. My preference is to take section 2 from C and marry it to the rest of alternative B—it has fewer words, and it doesn't point specifically to weaknesses. President Fisher is right that A and B may be better descriptions of some of our worries around the table, but they could feed in a not necessarily good way into the markets right now. Section 2 in alternative C would be a crisper, shorter way of not confirming the federal funds rate trajectory

that markets see as they look forward. I'd rather not confirm that trajectory. So if I had my druthers, I'd go with alternative B with section 2 from alternative C. Otherwise, I'd take "than anticipated" out and go with Christmas colors on alternative B.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I support an unchanged fed funds rate target. However, I strongly favor a symmetrical balance-of-risk statement because I believe that we will then be well served by market responses should incoming data differ from our current expectation. That was certainly the case when long-term interest rates fell after their June peak as the economy weakened. The Committee has chosen not to act more forcefully against the current rate of inflation—which most, if not all, FOMC participants believe is too high—because of the expectation that inflation will decline over time. I agree with that expectation and support that policy.

The market believes that it is unlikely that we will be raising the fed funds rate target in the first half of next year. Perhaps the market's expectation is based solely on the view that we will not get bad inflation news. However, judging from the lack of market response to the PCE price index report on November 30, which was higher than the market expected, the market believes that we will not act to raise the fed funds rate target during the first half of next year even if we have more bad news on inflation. The reason is that the bad inflation data will eliminate the market's current expectation of easing next year. Under these conditions, the ten-year Treasury rate might rise over a period of eight to twelve weeks, say, by a total of 75 to 100 basis points, and the stock market might fall 10 or 15 percent. I'm guessing the market believes that, if that happened, we would be unlikely to raise the fed funds rate target. That is certainly my view. Suppose, on the other hand, that we see a combination of benign news on

inflation and weak news on the real economy. In such a situation, we should be delighted if the market bids down the ten-year bond rate. We should encourage that response, and that is why I favor a symmetrical risk assessment. Doing so does not imply that we are soft on inflation. The policy stance depends on more than just the policy objective function. Policy stance depends equally on the structure of the economy and the important objective of pursuing a policy that is as predictable as possible.

If the Committee adopts the risk statement in alternative B, I ask that the minutes explain that at least one member strongly favored a balanced risk assessment. I believe that the staff forecast makes good sense and that the risks are symmetrical on both sides of that forecast, for both output and inflation. My position would be captured by a section 4 something like this: “Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information. The Committee judges that risks to the inflation outlook remain the predominant concern.” This language expresses our concern about inflation but does not say that we are contemplating a policy firming at our next meeting or the meeting after that.

Incidentally, the market inevitably reads any hint about the fed funds rate target as applying primarily to the next meeting. Anything after that will be superseded by the decision at the next meeting. I take the position I do not only for its advantages should data on the real economy come in weaker than expected. Suppose we experienced an inflation scare, including significant depreciation of the dollar on the foreign exchanges. With the dollar and the stock market falling and with bond rates rising, would we want the market to conclude that our language suggesting policy firming in the future, language repeated at every meeting since the pause in rate increases in August, should now be taken seriously? I believe that we would not



want the market to reach that conclusion on the basis of language crafted for a different purpose. We might want to send that message, but we might not. In the middle of an inflation scare, taking out that language might be difficult. Doing so would imply that we are not considering a policy firming. Yet we might be uncomfortable leaving it in because we might not believe a policy firming would be a good idea in the midst of market volatility. Why not avoid that potential problem now? I also take the position I do because I believe that our reference to policy firming is simply not credible. Events might transpire that would make policy firming a live issue. But given the information currently in hand, I believe that it is improbable that the Committee would vote to raise the fed funds rate target in January or March. Is it good policy to advertise a policy that we do not expect to pursue? To put it another way, what conditions would lead us to raise rates in January or March? Are those conditions remote, or do they carry a nontrivial probability?

In sum, I am not arguing for a relaxed view on inflation. Inflation risks are, and should remain, our predominant concern. However, I believe that a balanced risk statement, with an expression of concern about inflation but without a hint of future policy firming, will best serve us in the period between this meeting and our January meeting and perhaps beyond. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I agree that we should keep the federal funds rate where it is. I think that's our best chance of achieving various goals that we've all set here, relative to changing it in either direction.

I do think the risks remain unbalanced. I'm in favor of keeping the current section 4. I agree, Bill, that the Greenbook has a gradual reduction in inflation. It includes an implied assumption of a flat federal funds rate and a rise in long-term rates, not of 75 basis points but,

rather, of about 50 basis points, I believe. That trend in inflation is still very gradual relative even to the rise in long-term rates embedded in the Greenbook. Moreover, the risks around that trend, so long as the labor markets remain as tight as they are, remain skewed a little to the upside, and the costs of missing are larger if we miss to the upside rather than if we miss to the downside. So I'm very comfortable with continuing to suggest not only that we are focused on inflation but also that interest rates are more likely to rise than to fall, given our focus on inflation. The market doesn't believe it, but I think that's where we are. Maybe not in January and I'm not sure about March, but I couldn't rule an increase out under a plausible set of information. So I'm still very comfortable with section 4, and I think we ought to keep it until some other time. As the statement evolves, we may get away from forecasting our own actions. We've been evolving in that direction. But we are where we are, and I think it would be not representative of where the Committee is if we changed it at this point.

I like the Christmas version of alternative B. We do need to indicate to the markets and to the public that we are aware that some data have been just a touch—or, as Governor Mishkin said, a smidgen—weaker than we anticipated. I like the new version because it does home in on production and spending. By implication, the labor markets haven't been weaker than we anticipated, so I think it's a more accurate representation. We really haven't—at least the staff hasn't—revised down GDP growth very much once you take account of the auto distortion. So I think this is more accurate. I like the fact that it says “slightly weaker” rather than the “somewhat” in the other alternative B. I think that's more representative. I could live without “than anticipated.” I was asking myself about “and spending had been slightly weaker”—that raises the question “than what?” In truth, it is slightly weaker than anticipated, but the Committee doesn't have a record showing exactly what we're anticipating. It is slightly weaker,

if you think about the industrial production data, than it was a few months ago. So I think it can stand without “than anticipated.” Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. I support maintaining the current federal funds rate target today, and I can support the language in alternative B. I’m trying to decide between the holiday language and the original, and I’m struggling with the “weaker than anticipated.” So I agree that, if we remove it, I would be comfortable with that assessment. But I am also concerned that our current risk-assessment language is becoming stale. Back in August, when we first chose to pause, we were nervous that our next move was going to be up and that inflationary pressures could intensify. We thought it was critical to tell the public that we would be ready to resume raising the fed funds rate if our outlook required us to do so. I myself was more than half expecting that such would be the case. But the incoming data since August have not altered the Greenbook baseline projection for the next year, and so I’m less worried today than I was in August that we will have to do more on the upside on the fed funds rate. Today is not the day to remove that language or change that language. But if we believe that the path of the fed funds rate in the Greenbook is the one that is likely to evolve, we should start to prepare markets for our maintaining the current federal funds rate longer than they currently expect—because they expect us to move down. So I would rather start to craft some language that would signal to markets that we’re likely to stay at our current fed funds rate longer and, depending on how the economy unfolds, that we may eventually be more restrictive than we appear to be today. I agree that today is not the time to change our language significantly, so I support alternative B.

CHAIRMAN BERNANKE. Thank you. First Vice President Barron.

MR. BARRON. Thank you, Mr. Chairman. I feel that current policy is about right, given the risk to the economy and the potential that inflation will not turn down in the near term. Thus I would favor no change at this time. We'll get further readings on employment before our next meeting, and we'll also know about the level of spending that is likely to occur over the holidays. Although it's doubtful that we'll have a clear reading in January on the future direction of housing, the additional data will perhaps provide us with some clue as to how long and how deep the downturn will be for this sector. The longer the downturn in the housing sector continues, the greater the potential for spillover into other sectors, creating the potential for some easing in the relatively tight labor markets that we've all talked about today. That said, my own take is that, without some significant spillover, we should be on track for a soft landing.

As far as the wording is concerned, I'm not sure how many options we've got on the table, but I would prefer alternative B, dropping the "more than anticipated." I'd be a little cautious about introducing a new phrase, whether it's production or spending, because we might have to specify what spending. I think we're talking implicitly about business spending, but we have to remember that the consumer sector has held up quite nicely for us. So let me just stop. I prefer alternative B in exhibit 4, and I would drop "more than anticipated."

VICE CHAIRMAN GEITHNER. Mr. Chairman?

CHAIRMAN BERNANKE. Yes.

VICE CHAIRMAN GEITHNER. I have a clarifying question raised by Pat's question. Please remind us, Dave—has real consumer spending slowed more than anticipated?

MR. STOCKTON. No. Real household consumption has been exactly as expected and has not shown any signs yet of slowing. Business spending, on the other hand, has been slowing in equipment and somewhat in construction.

MR. WILCOX. The spending side of the national income and product accounts is really the unspoken implication.

VICE CHAIRMAN GEITHNER. The other difference between exhibits 4 and 5 is “weaker” versus “subdued.” Does “subdued” sound weaker than “weak”? [Laughter] Or is “weak” weaker than “subdued”?

CHAIRMAN BERNANKE. Maybe Michelle can tell us the answer to that. [Laughter]

MS. MINEHAN. I still vote for section 2 of alternative C.

CHAIRMAN BERNANKE. President Minehan has a clean solution. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I think the pause initiated back in August is paying dividends. We’ve been able to gather valuable economic intelligence at no discernible cost to FOMC credibility. Given the recent signs of weakness in economic activity, I do think the downside risk to the outlook has intensified. A further rate increase at this time would unnecessarily increase the odds of a much sharper and more-damaging economic slowdown. Even though inflation has shown some signs of moderating, the risks to a gradual decline in inflation remain clearly biased to the upside. Weighing these two risks, I still see inflation as the predominant risk, and therefore, like Governor Kohn, I am comfortable with the risk assessment in section 4 as it stands.

I think we’re entering a critical phase for policy. Inflation may not come down as desired, and a further rate increase may be needed or, hard as it is to imagine, market participants may end up being right that the economy will slow much faster than we anticipate and call for rate cuts. We need to be in a position to react quickly and flexibly to change, whatever the circumstances may be, and I think alternative B accomplishes that because it accurately reaffirms our concern regarding inflation while it leaves our options open.

With respect to language, my first choice, like President Minehan's, would be to use the language for section 2 in alternative C. It omits any reference to recent data or to what we anticipated and simply adds the word "substantial," which I regard as a nod to recent data that suggest a greater slowing in housing. My second choice for section 2 would be to use the substitute language in the Christmas-colored exhibit 5. I also support President Minehan's suggestion to omit any reference to what was anticipated because I agree with her and with the point that President Poole made before our meeting—that referring to differences from what was anticipated simply raises the questions of who forms the anticipation, what the anticipation was, and when it was formed. In addition, I think it's a bit misleading because, although some recent data on the spending side have been weaker than we may have anticipated, we've also had data from the labor markets that have been stronger than we anticipated. So I fear that alternative B, section 2, leaves the false impression that we have significantly revised downward both our view of the outlook for growth and, accordingly, our estimate of inflation risks.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. First, I want to thank the staff for including chart 6 in the Bluebook. As several of us suggested last time, it's a good addition to have for every meeting.

Since August, policy has been on hold for us to assess the inflation situation and the growth outlook, and at this point I think we would continue the period of assessment until the situation is clarified further or something changes. Today I would go with alternative B. Listening to the discussion, I still come down for the wording in alternative B. I would go with exhibit 5, which is the Christmas-colored version, and I would delete "than anticipated." I think it does read better that way. Don, in answer to your question, I think the markets would read this as being slightly weaker

than history. So I think that's appropriate. I can see the argument for alternative C: It is much cleaner, and it relates directly to what we said last time, with a slight modification. However, there has been a slight weakness in the data, and I think it's reality, and we should recognize it. In terms of whether "weaker" is weaker than "subdued"—actually the words are "somewhat more subdued" and "slightly weaker." [Laughter] On that basis, I'm comfortable with "slightly weaker." However, stepping back during this period, I think it is useful to consider the kind of information that would lead us to change the policy rate, as several people have talked about here. When we assess the inflation situation, although members of this Committee may have different views of price stability, I think there's a clear consensus that core inflation has been too high. In our decision to pause, too, there's a consensus that we can be patient, at least for now, about the time frame for core inflation to fall. The question is, "How patient?" We expect that inflation will gradually come down, but the corollary to this is that core inflation should not noticeably deteriorate over the near term. In the medium term, we should be more clearly on a path to lower inflation. Of course, steady progress would be best, but what we all want is at least to be on the path. The implication is that we must be willing to firm policy if core inflation increases in the near term or the medium term or if it fails to be on a clear trend toward price stability over the longer term.

When we look at the growth side for the longer term, I think the consensus view is that we want to carefully monitor growth and resource slack, being mindful of the downside economic risk that we talked about and the Chairman summarized. We talked about the bimodal economy, but we also must remember that sustainable growth rates are likely lower. The Greenbook talks about 2½ percent, a lower number than what we've been accustomed to in recent years, and the implication is that we could be facing increasing resource pressure at GDP growth rates that were previously viewed as below potential.

So the bottom line is no change in policy today. Inflation risk still predominates. I'm nervous about the expected slow improvement in inflation, but I admit that the jury is still out on whether it's a problem. The economic fundamentals still suggest a return to potential growth rates by the end of '07, but we have to be mindful of the adverse changes in the growth outlook as well.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. I take my cue from the earlier observation that we have received a lot of additional data but not much additional information, and I agree with it. So, first of all, I favor no change in the federal funds rate. I think that has been appropriate for a while, and I think it continues to be appropriate. As far as language under alternative B is concerned, I must admit that some of the discussion is perhaps overly nuanced for me. But coming down to a choice, I would prefer some version of section 2 from exhibit 4, taking out the phrase "more than anticipated." I don't want to get into a debate about exactly what spending encompasses or doesn't encompass from the version in exhibit 5. I agree with those who have already commented that the data have turned out to be a bit softer than we expected and, I think, than was generally expected. We should acknowledge that; I mean, let's not pretend that it hasn't occurred. So with that, I'll end my remarks.

CHAIRMAN BERNANKE. President Stern, are you advocating exhibit 4 about growth as opposed to exhibit 5 with the indicators?

MR. STERN. Yes.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. In past meetings I have expressed my misgivings about whether our strategy is going to bring inflation down fast enough. So I won't belabor those again today. As I said earlier today, the inflation picture has, if anything, eroded a bit. So my misgivings remain. The



outlook for real growth could conceivably weaken enough to alter my perspective on the fed funds rate, but that hasn't happened yet. The data on manufacturing and nonresidential construction were marginally worse than expected, but they haven't fundamentally altered my assessment nor, I take it, the assessment of many others that the current weakness is transitory rather than highly persistent. I still think the economy could theoretically handle a marginally higher fed funds rate. I'm also mindful of the apparently wide gap between the assessment of the market and what I believe to be the consensus around the table. In that context, I'm unwilling to signal that my concern about the trajectory of core inflation has diminished or to alter the general cast of the announcement regarding inflation. Thus, I favor alternative C. However, on the off chance that the Committee prefers alternative B, [laughter] I'd suggest that exhibit 5 is better than exhibit 4 on alternative B, section 2. I'd also associate myself with the views of Presidents Yellen and Minehan that alternative C, section 2, would be preferable to either. But I don't even know if I have a say on that kind of thing. [Laughter]

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. I, too, favor maintaining the federal funds rate at its current level at this point. As many people have said, the incoming data have been voluminous but not very informative. However, inflation continues to be higher than I'd like to see it and is forecast to remain so for longer than I'd like to see, thus putting our credibility at risk. I am more optimistic than the Greenbook about the possibility for a quicker rebound to potential. But even if you take the staff's Greenbook forecast, with growth expected to be below trend for at least several more quarters before returning to trend, I'm comfortable with maintaining the current federal funds rate and the implicit firming that doing so would imply as the economy slows down.

Although I don't think we should raise the fed funds rate today, I do want to put on the table and reemphasize, as several people have, that we need to acknowledge that if real growth rebounds quicker toward trend than is currently forecast, whether in the fourth quarter of this year or the first quarter of next year, then we must be in a position to raise the fed funds rate at that time. I happen to put more probability on that being the case than perhaps some do. A failure to do that or to signal that we will do that would put considerable upward pressure on the inflation outlook and on the public's perception of our commitment to price stability. Of course, if we begin to see much larger spillovers from housing corrections or from other sectors, which I don't think we will, we may want to allow the nominal funds rate to decline as the equilibrium market rates decline—again, not to exploit a Phillips curve type of tradeoff but to drive the real rate down at the appropriate time. But that would also be signaling that we are content with the current level of inflation, and I don't think we are at this point. So I don't think that's really in the cards. Given the outlook, I see not much to be gained and much to be lost from lowering the fed funds rate, as many people have indicated.

In regard to the language, I lean toward alternative B, but I must confess I'm still a novice at the nuance of some of this language stuff, and I go back and forth. I am sympathetic to the view expressed by President Minehan and to Bill Poole's comments about the words "than anticipated," but I am concerned about section 2, and I have some mixed emotions about it. It seems to me that the way section 2 is currently being construed is a bit asymmetric. President Yellen was making this point. We talk about the weakness that we've seen, and then we make a comment that says, "But we expect growth to be moderate." That seems to me to be an asymmetric treatment of what we've really been talking about. If we're going to be explicit about where we've seen weakness, then we also ought to be explicit about why we still see growth as being moderate because otherwise you see only one side of the coin. Whether we talk about strength in the labor markets or

strength in consumer spending, it seems to me that we need to balance the statement; otherwise the section doesn't make a lot of sense to me.

Now, as I think through that, I become more and more attracted to President Hoenig's view that maybe the less we say the better because saying more requires more explanation. In general, I have somewhat mixed feelings about the language issue. I tend to think that we ought to change the language of the statement more often rather than less often because putting in a new word is always excruciatingly painful and understanding the nuances of what we're trying to convey to the market is very difficult. One alternative is to be much more eclectic about what we say and either use the minutes to explain it further or not. I don't know that I would necessarily advocate doing that, but I think that we need to think about using the language in the statement in ways that perhaps don't lock us into things in the way the language currently does. That's my observation. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Plosser, the communications subcommittee will help us solve that problem. [Laughter] Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I support leaving the rate unchanged today because I still believe that the risks are to the upside on inflation and so we need to persevere at this level for a while. In terms of the wording, I want to offer another alternative. [Laughter] I'm concerned that in exhibit 5, alternative B, we've added "substantial" to housing and have noted weaker indicators. Yet the view around the table—and clearly my own view—is that the indicators have been mixed. A lot of strength is still showing. Consumer spending looks good. Employment looks good. If we want to talk about indicators, I would prefer some words that deal with President Plosser's comments and say that "although recent economic indicators have been mixed, the economy seems likely to expand at a moderate pace on balance over the coming quarters" because that's what we're

really saying. There's some good news and there's some bad news. By focusing just on the negative, I think we are signaling that we're more concerned about a slowdown. I at least think that is inconsistent with a tilt of risk toward inflation. So I would do something along that line or go back to exhibit 4, which basically just recognizes that in the aggregate the economy has slowed a bit; but I'm uncomfortable with addressing only the weakness and not the strength.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Let me put in another plug for section 2 of alternative C: "Economic growth has slowed over the course of the year, partly reflecting a substantial cooling of the housing market." Why do you want to go on and on about it?

MR. KOHN. That's what we're paid to do. [Laughter]

CHAIRMAN BERNANKE. Let me just say what the logic is behind it. The logic is that we'd like the markets to know that we are awake, [laughter] we are watching the data, we have seen things coming across the transom, but nevertheless, we have the following views. Perhaps the logic is not good, but that's the reason.

MS. MINEHAN. I can understand the logic, but I wonder whether "substantial" does that enough for us. That's the only question I would pose.

CHAIRMAN BERNANKE. Okay. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. I, too, favor no change in the federal funds rate today and agree on the risk assessment in section 4. Let me make three points. First, I think that there is a rebuttable presumption—particularly in December, given what's going on in the markets—of somewhat less liquidity and somewhat less interest in surprises now than at other points that favors fewer changes rather than more. Second, I think your remarks, Mr. Chairman, the Vice Chairman's remarks, and several people's remarks over the intermeeting period have focused

on uncertainty and have tried to challenge the markets about their degree of certitude regarding what's likely to happen. When I review the language, I try to keep that in mind and reinforce the view that they need to be doing their own homework and to be thinking about what the tail risks are. Third, it's not our job to force our forward curve of interest rates to match the markets, but I'd rather not reinforce their views either.

So when I turn to the language, my preference is to agree with President Minehan's alternative C. But we've been whispering about Governor Bies's compromise over here, and just to make the words even briefer, a suggestion for the wording is, "Although recent indicators are mixed, the economy seems likely to expand at a moderate pace on balance over coming quarters." This wording acknowledges what's going on in the markets, Mr. Chairman, and so it captures what you rightly said about our continuing to pay attention rather than having a knee-jerk reaction. At the same time, it doesn't put more of an emphasis on data on either side of the line. That strikes me as a reasonable compromise, given all that I've heard today. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Given that the avalanche hasn't really moved our assessment very much, I certainly don't see any reason to move interest rates now. I think it is important to acknowledge in section 2 some of the slowing that we've seen. As we have discussed, there are two ways to do that. One is to include the substantial cooling of housing. I think there's consensus for that—I haven't heard anything said to the contrary—and I think it's important that we do have that. Then the question is whether we want to go further and whether we can do that clearly, rather than cause confusion. Obviously, the simple option is just to cut it all out—take the Minehan approach and say "substantial" is sufficient. As Governor Warsh mentioned, we've been thinking about a simplified version of alternative B that mentions just some "recent indicators." Then we can get out

of the discussion of production, spending, and the specifics. But I do think that's better than saying "growth." It's also better to talk about some of the indicators rather than just the overall growth number, which was in exhibit 4. So I think exhibit 5 is better that way. Then it's a nuance whether we want to include "somewhat subdued," "slightly weaker," or "mixed," and whether we use "were," "have been," or "are." I'm not quite sure exactly where I stand on all of those, but I do think that simplifying the language to some degree and just saying something about indicators would be the way to go.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Given the discussion today, there really is no reason to change our stance in policy or change my views on policy. There is a bit more uncertainty, so I think the word "vigilance" is important. Then we need to be able to move quickly, and it's not clear to me that we are necessarily talking about quickly in terms of lowering interest rates; we might have to raise interest rates. So I think we just have to be aware of that.

I am comfortable with the current assessment of risk. I think it would be a mistake to move it now, which I don't think anybody is suggesting, and it's not clear to me that it wouldn't be a bad idea going forward. Even if we have inflation declining, we're in a situation in which we actually want to allow real rates to go up. In that sense, the assessment of risk as it is currently stated says exactly that. If we change the assessment of risk to be more balanced, the market may react and think we're getting softer on inflation. So I am comfortable keeping it this way. Even though it's not on the table today, it would take a lot more for me to want to change it.

On the issue of language, I guess I want to use the smidgen principle. My view is that things have not really changed very much. There's a smidgen of weakness. Again, the nuances of this stuff are not my thing—I'm like President Plosser in that we're sort of newbies. But the basic

principle here is the less we change, the better it is. There's the issue about whether alternative C would work by saying just "substantial." That actually does indicate that we're aware that things have gotten a little softer, so I would be comfortable with President Minehan's suggestion. But I'm also not uncomfortable with just shortening exhibit 5, which says also that some recent indicators have been mixed, period. I'm not sure which one of those is better, but I think the key idea here is that we don't want to change these a whole lot. We just want to acknowledge that, in fact, things have been slightly softer but the change is not a big deal. Thank you.

CHAIRMAN BERNANKE. Thank you. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. May I begin with a question? When was the last time we used the phrase "indicators have been mixed"? Is there precedent for that?

MR. MISHKIN. I thought you were going to ask about "smidgen." [Laughter]

CHAIRMAN BERNANKE. In the past the Committee has often referred to "intermeeting data," for example.

VICE CHAIRMAN GEITHNER. As being mixed? It's probably true that at any time the indicators are mixed, but does this phrase have substantial connotations based on precedent?

MR. KOHN. I don't think so.

VICE CHAIRMAN GEITHNER. All right. My basic view, Mr. Chairman, is that we should keep the fed funds rate unchanged. Circumstances justify a very modest softening of the signal in the statement. I don't think we should do that by changing the balance-of-risk assessment. I think we should do it by acknowledging very subtly that things have turned out slightly softer than perhaps we expected and that we might have a little more uncertainty going forward. The virtue of Governor Bies's suggestion is that it acknowledges uncertainty, and the combination of the acknowledgment that the downturn in housing has been substantial and the phrase indicating some

uncertainty about the future is pretty good. So I'd be comfortable with that. President Poole made a very good case for the importance of reminding ourselves that we need to make sure we have some flexibility going forward to react to a material change in the outlook. But I don't think we've had enough changes to our outlook to justify a substantial change in the signal at this point. To go to a balanced risk assessment or to go substantially further toward one would likely induce some larger change in market expectations and some greater easing of financial conditions than we have already seen. That is not something we need to induce at this time, principally because of our uncertainty about whether we're going to get enough moderation in inflation. So I would be comfortable with "recent indicators have been mixed." I think I'd slightly prefer that to going to alternative C, section 2, and I would prefer both of those to alternative B in either exhibit.

CHAIRMAN BERNANKE. Thank you.

MR. HOENIG. Mr. Chairman, I think we have just been to North Dakota. [Laughter]

CHAIRMAN BERNANKE. I would say we crossed the border. [Laughter] Well, let me try to summarize. [Laughter] First of all, the economy is still on the course that we have been projecting for some time. A soft landing scenario with some slow but, I hope, decided reduction in inflation seems to be a reasonable expectation. However, there still are significant uncertainties in the forecast, and we're quite aware of that. I note parenthetically that it's a good thing that the bond markets aren't simply parroting our statements. They're providing their own take, and we should use that information and not necessarily consider it a failure if their views are distinct from ours. So since the situation seems to be on trajectory, I would advocate today not changing the federal funds rate.

With respect to the statement, we did try in the first iteration to make some changes to the assessment of risk. I have some sympathy with President Poole's view in that, read literally, our



assessment of risk admits no possibility that our next move will be down, which I don't think could be true under any circumstances. However, we have been using this language for a while. We have been clear in our minutes that we do see some downside risk to output. The market, I think, has understood whose statement we are trying to emphasize, our particular concern about inflation, and our willingness to raise rates if inflation doesn't moderate significantly. Again, although I'm sympathetic to President Poole and I'm trying to think about how we are going to move away from this language into other forms of language, I think, along with Vice Chairman Geithner, that our changing the risk assessment today would send a very strong signal that our discussion has not suggested. That's why I propose to leave the risk assessment unchanged for today but to take on board the concerns that President Poole has raised about getting it to a perhaps more accurate description of our risk assessments and expectations.

On section 2, the two suggestions that I think have commanded some significant support are, first, President Minehan's suggestion of using the second section under alternative C and, second, the alternative in the Christmas-tree colors using "although recent indicators have been mixed" in the present perfect tense—"although recent indicators have been mixed, the economy seems likely to expand at a moderate pace on balance over coming quarters." I think those are the two that people have preferred. I don't think it makes a great deal of difference, frankly, but I lean personally a bit toward including the reference to indicators only on the grounds of trying to signal to the market again that we are watching the data, that we are aware of developments in the economy, and that we're not just taking the statement out and putting a new date on it. So that would be my recommendation—that we use the phrase "although recent indicators have been mixed, the economy seems likely to expand," and so on. I'd be happy to take comments.

MS. MINEHAN. That's fine.

CHAIRMAN BERNANKE. Is there a comment?

MS. DANKER. I'll be reading the directive and risk assessment from page 23 of the Bluebook.

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

Then: “Nonetheless, the Committee judges that some inflation risks remain. The extent and timing of any additional firming that may be needed to address these risks will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.”

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
Governor Bies	Yes
Governor Kohn	Yes
Governor Kroszner	Yes
President Lacker	No
Governor Mishkin	Yes
President Pianalto	Yes
President Poole	Yes
Governor Warsh	Yes
President Yellen	Yes

CHAIRMAN BERNANKE. Thank you very much. We have one more item—on communications. I'm going to turn over the floor to Governor Kohn.

MR. KOHN. As we get ever deeper into North Dakota here, [laughter] I don't know what President Stern thinks about this.

MR. STERN. I was going to say that I'm the only one here, on the Committee anyway, who gets there with any frequency, and people have suggested that I should defend North Dakota. But I must say that I felt the joke was apt. [Laughter]

MR. KOHN. Getting back to other communication issues, I have, first, a bit on the January meeting. Our January meeting will be another two-day meeting, and part of it will be on communication issues. This one will be on forecasts. What can we do to improve the way we communicate our outlook about the economy—really the medium-term outlook—and how it fits into our explanations of monetary policy actions. The focus is not so much on how we would use this to signal our price stability objective, which we will come back to in March. Obviously, the two considerations are closely related, but the focus will really be on the forecasting process and how we can do it better and communicate about it better. Three sets of background materials are in preparation: (1) a memorandum from International Finance on foreign experience with forecasts; (2) a memo from Research and Statistics on some of the choices available to us—the variables, conditioning assumptions, periodicity, and things like that; and (3) a memo from Monetary Affairs on the interaction of these various choices with the governance of the Committee—that is, who owns the forecast and the explanation.

Moving on to the memo that you received from the subcommittee on communications—as you know from that memo, several Committee members thought it would be useful at this meeting to have at least a brief discussion about how we as individuals talk in public about the subjects of ongoing deliberations on communication issues. I include myself in that list of people who thought that this discussion would be useful, without necessarily implicating the other members of the subcommittee. We are concerned that our individual public statements could impede our ability to reach internal consensus and to control how whatever that consensus turns out to be is

communicated to the public. I think that finding consensus on some of these issues is going to take considerable flexibility and give and take among Committee members. One concern is that the more individuals sort of pre-announce their positions, particularly in public, the harder it's going to be to find that consensus around the table. We are in this process. There's no need to push the Committee toward doing something. The Committee is doing something, and I think we need to keep all our individual options open as we go forward. Another problem is communication with the public. One of my concerns is that statements by individuals about their particular positions risk confusing the public about where we might come out, setting up inaccurate expectations of where we're coming out, and provoking reactions in the public about something that the Committee might not be doing. Whatever we come up with, the Committee and the Chairman are going to have to keep close control on how we roll it out to the public and how we tell people what we're doing and why. No one should be or can be expected to repudiate his or her past positions—say, on comfort zones—but we can think about not elevating the topic, not bringing it up so much ourselves, not pushing it further in public while the Committee is deliberating.

We sent this memo really to get Committee reactions. To be effective, we need a consensus on this issue among the Committee members—and I would include the staff sitting around the edge of the room—to control our public statements on this issue. If some of us do it and others don't, it isn't going to work. So I would be interested in your reactions. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. I agree. I can't imagine putting a position out in public. I'm concerned that I do get questions: "This has been in the minutes. What do you think?" I feel a little uncomfortable just saying, "I'm not going to talk to you about that." I feel more comfortable saying, "That's a tough issue. We've gone back and forth. We need to think it through. There are strong views." I

mean to talk about it a bit without putting a big position out there. I just don't want to say to them, "I'm not talking about this." It sounds incomplete or half-baked.

VICE CHAIRMAN GEITHNER. I would not interpret Tom's "no comment on the issue" to be inconsistent with what you were proposing, Don.

MR. KOHN. Right. I think we can talk about it without giving a position. I mean, when people have asked me, I've said, "There are a number of things under consideration. There are a lot of issues here that we need to work through."

MR. HOENIG. I feel very comfortable without giving out, "This is what we ought to do," and that sort of thing. That's helpful.

MR. MISHKIN. I think there's a fine line here. It's extremely important for us not to be taking positions, exactly along the lines that have been suggested. But there is a question about educating the public about the issues, not about the specifics. Because of the fine line, I'm not sure how we should think about this question: Whatever we decide, at some point we don't want to just spring it on the public, for obvious reasons. There is a role for communication in terms of educating the public about the issues, many of which we have been discussing—for example, in speeches about the importance of anchoring inflation expectations. Now, how we communicate that is actually one of the issues that we have to discuss. Having the public understand what monetary policy is about is very important in terms of the education process, and yet we also need to make sure that we are not getting into any details. So there's a fine line here. It might be interesting to hear from other participants about how we can achieve getting the public to understand what monetary policy is really about, which a lot of the public doesn't, and yet not actually create expectations that we're going to go one way or another in terms of communication. We certainly don't want to cut off this discussion, which has been ongoing between the Federal Reserve and the

public—actually quite successfully. It’s amazing when you look where the public was ten years ago versus where they are now, and it’s because of the speeches, articles, and other written communication that the System has been doing quite successfully.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. I’d just like to point out that we can respond to questions by pointing to the brief mention in the minutes that the Committee has been talking about communication issues. We can also remind people that the details of the proceedings are confidential until they are released in the minutes, the statements, testimony, and eventually the transcript. “Not at liberty” is a standard response having to do with all the deliberations around this table. The only other thing I would add is that some of us have been on record for a long time. So when I get questions about inflation targets, I say that the first speech I made outside St. Louis, when I came to the St. Louis Fed, included some discussion of that issue, and I repeat what I said eight years ago and leave it at that.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. I’d just like to echo both of those points, which makes this issue in some ways much more subtle and difficult to pull off. I agree with Rick 100 percent. Part of our job here is education. We have to walk the line between talking about the subtleties of monetary policy and issues that confront us and educating the public, because the last thing we want to do is to clam up about monetary policy to such an extent that the public doesn’t get educated and doesn’t understand what we’re doing and why. So it is important that we bring them along with us to some degree as we talk about it. The other point that I would reinforce is what Bill said: Many of us are on record as having points of view on some of these issues, and we can’t just deny that those exist.

CHAIRMAN BERNANKE. Let me say just a few things. First of all, the freedom of individual members to speak is a very important value. We are not trying in any way to suppress

that. Second, I agree with Governor Mishkin that the education process is very important. Third, I would say that past positions are past positions, and no one is asking anyone to repudiate anything. I think the response of President Hoenig is perfectly appropriate—to acknowledge the issue, to acknowledge the arguments on both sides, and to acknowledge even your own past positions. The only point is to avoid actively taking strong, specific positions on particular issues that are really up for debate in the Committee. I think that we as a Committee would agree, for example, that good communication is very important and that there are arguments on both sides of inflation targeting. But, as Governor Kohn said, we do want to make sure that the atmosphere within the Committee is conducive to getting agreement. Then I and others will have to explain this to the Congress and others, and we want to make sure that they haven't heard different positions that, in fact, do not reflect what we come out with. So please don't overstate what we're discussing here. I mean, we're not asking for anything like "mum's the word," but simply requesting that you have some perspective on the vigor with which you advocate specific positions over the next few months.

President Minehan.

MS. MINEHAN. Actually, I think Vice Chair Geithner was slightly ahead of me.

VICE CHAIRMAN GEITHNER. No, go ahead.

MS. MINEHAN. Thank you. I think Don's and your points, Mr. Chairman, are very well made. Coming at this maybe from a little different perspective than a lot of people do, I think there's a lot we can say about what the Committee has already done in the realm of communications. The big watershed was in 1994—in actually telling people what we were doing. You can say a lot that is positive—for example, the timeliness with which we bring the minutes out. Also, I can't see that people have difficulty understanding that we have issues left to resolve. If people ask a question about communications, we can say that we've taken really major steps and

that we're contemplating what more we should do to meet the objectives of monetary policy better. So my own view is that, no matter where you stand on this subject, you have a solid track record of Committee action to talk about without even getting into inflation targeting.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Let me just say a couple of things. I think Rick's point about education is right. You can make a statement educating people about the virtues of price stability and anchoring long-term inflation expectations and the reason that's important, without taking on the challenge of educating people today about alternative ways of achieving that objective. Our debate about inflation targeting and communications is really about means not ends; and my view about education on the latter issue about means is to avoid taking on the challenge of educating the public until we know where we want to go. Once we know where we want to go, we can figure out how best to create the broader public foundation to make that possible. I'm sure that we'll have different views on that.

My second point is about past positions. This is easy for me because I don't have past positions about these issues to echo or to repudiate in public. I would make a slightly different suggestion for the way to respond to those questions from, I think, Bill. You can refer people to your past positions without repeating them in substance and nuance. I don't know what the Chairman and the Vice Chairman of the Board plan to do, but I expect that you won't feel the need in public going forward to repeat your past positions on these issues. I suspect that you will refer people to your past positions without reminding them about what those were. That distinction is important, I think, because I don't know how you get into repeating or summarizing your past position without inevitably getting into the broader set of choices that we're going to be debating in the Committee.



One final point, and I think Don said this more eloquently than I can say it, which is that we all have an interest in having this discussion take place below the radar screen of public debate until, again, we have a better sense of where consensus is going to lie. The more we move it into the public debate, the more risk we face of all the concerns that Governor Kohn referred to.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Just very quickly, I think what's clear from this discussion is that, in dealing with the issue of inflation targeting, there's no need to be on the offensive. The issue is how we handle the defensive—and I think Vice Chairman Geithner's point is correct—if we talk about the ends and desires of monetary policy rather than getting into the means. As you know, Mr. Chairman, after the last discussion I was very worried about what was sent around in the first draft of the minutes—I think President Minehan was as well—even about what we ended up saying in the minutes. So, again, my view is that the less said, the better. If we are on the defensive, I would urge everybody just to stress the fact that the topic is under discussion and no decision has been made and try to make it as simple and as quick as possible.

CHAIRMAN BERNANKE. Thank you. Let's bring this discussion to an end. Everyone has to use his or her own judgment, but we just wanted to bring to your attention some of these considerations as you think about your public appearances. The date of the next meeting is January 30 and 31. The meeting is now adjourned.

END OF MEETING