Meeting of the Federal Open Market Committee
September 20, 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, September 20, 2006. Those present were the following:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Ms. Bies
Mr. Guynn
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. Reinhart, Secretary and Economist
Ms. Danker, Deputy Secretary
Ms. Smith, Assistant Secretary
Mr. Skidmore, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Baxter, Deputy General Counsel
Ms. Johnson, Economist
Mr. Stockton, Economist

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

Mr. Kos, Manager, System Open Market Account

Messrs. English and Slifman, Associate Directors, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Mr. Reifschneider, Deputy Associate Director, Division of Research and Statistics, Board of Governors

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

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

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

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

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

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

Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis

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

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

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

Transcript of the Federal Open Market Committee Meeting on September 20, 2006

CHAIRMAN BERNANKE. Good morning, everybody.

ALL. Good morning.

CHAIRMAN BERNANKE. We have two milestones to note today. First, we'd like to welcome new Governor Rick Mishkin. Welcome, Rick. Rick attended FOMC meetings from '94 to '97 when he was on the New York Fed staff, but this is the first time he has gotten to sit at the big table. [Laughter]

MR. MISHKIN. I wanted to sit right back there, but they wouldn't let me. [Laughter]

VICE CHAIRMAN GEITHNER. New York's view is that they work for Rick. [Laughter]

CHAIRMAN BERNANKE. On a sadder note, today is President Guynn's last meeting. He has been Bank president and FOMC member for ten years and has served the Atlanta Fed for a mere forty-two years. We congratulate you. We will have a lunch in your honor after the December meeting and will have a lot more to say then.

MR. GUYNN. Thanks.

CHAIRMAN BERNANKE. Thank you for outstanding service for an extended period of time. Let's begin, then, with Mr. Kos.

MR. KOS.[1] Thank you, Mr. Chairman. Among market participants, September has a reputation for being difficult on portfolios, for sudden bursts of volatility that lead to risk aversion and wider spreads, and for sometimes spectacular blowups in the speculative community. The ERM crisis in 1992, Long-Term Capital Management in 1998, and the aftermath of the terrorist attacks in 2001 are three of the more notable examples.

Until Monday, this year looked different. Spreads were and they continue to be narrow. Volatility has generally been low, with the notable exception of energy. Yields are benign, and equity prices, if anything, have been rising in recent weeks.

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

The massive loss disclosed on Monday by a large hedge fund has had remarkably, almost suspiciously, little spillover effects thus far. But with political crises suddenly popping up in Hungary and Thailand, it may suggest that risks in some of these smaller, less-liquid market sectors such as emerging markets and commodities have risen. Overnight the Thai baht was slightly weaker, Thai banks and markets were closed, and currencies and equity markets of neighboring countries were, on balance, only marginally weaker. Meanwhile in the G3, markets have generally been calm, though recent moves suggest a more sober outlook for growth than had been priced in earlier this summer.

On page 1 of your handout, the top panel graphs the three-month Eurodollar deposit rate in black and the same rate three, six, and nine months forward in red since the beginning of the year. In recent weeks, forward rates traded through the cash rate as assorted reports—especially housing and inflation data—convinced market participants that (1) the Committee would continue to hold the target funds rate steady for sometime longer and (2) the probability of an ease early next year was far more likely than a resumption of the tightening cycle. That view was seemingly shared by investors in the Treasury market. As shown in the middle panel, two-year and ten-year yields have been gently declining since the June meeting. The ten-year yield currently trades about 50 basis points below the target funds rate—the widest negative spread since March 2001. Meanwhile, various measures of the yield curve have now been mildly inverted for several weeks—perhaps also reflecting the market's view that a slowdown is in the offing. The bottom panel graphs the straight ten-year breakeven rate and the five-year rate five years forward. Both declined modestly since the last meeting, helped by inflation readings that did not repeat this spring's elevated numbers and also by the moderation of commodity prices in general and energy prices in particular.

The view that growth may be less robust was reflected in overseas markets as well. On page 2, the top panel graphs the calendar spread for interest rate futures between the December 2007 and the December 2006 contracts for the G5 economies since January 1. In recent weeks that spread has, on balance, been declining slightly as markets have taken out tightenings that had been priced in for coming quarters. Even in Europe, where the ECB has been talking tough, market participants are reassessing what effect a U.S. slowdown would have on the ECB's trajectory. The middle panel graphs ten-year sovereign yields for the United States, Canada, the United Kingdom, and, as a proxy for the euro area, France. Those yields rose during the first six months of the year and have retreated more recently. While there is a story for each economy, the most recent sets of data have been slightly less favorable, and forecasts for the next few quarters have been trimmed back. Meanwhile, as shown by the middle right panel, U.S. and Canadian breakevens have declined slightly. In contrast, breakeven rates in the United Kingdom and France have risen somewhat. Indeed, the ECB has repeatedly voiced concerns about rising headline inflation and the persistence of that trend.

Japan is a somewhat special case. Through midyear, forecasts for Japanese growth had been rising. Deflation was ebbing, loan growth was rising, and the BoJ opportunistically exited its quantitative easing policy in March and then exited the zero interest rate policy in mid-July. However, as shown in the bottom left panel, yields could not get past 2 percent and then began to decline as data such as machinery orders disappointed investors and led them to question how fast the BoJ would raise interest rates. Then on August 24, Japan released revisions to the CPI, which showed that inflation had been lower than previously reported. Markets quickly pushed back the timing of future call rate increases despite the BoJ's assertions that the revisions did not change its basic outlook. Japan does have a nascent inflation-linked Japanese government bond market. The bottom right panel graphs the breakeven, which has fallen from about 1 percent to about 60 basis points. As shown in the top panel of page 3, the entire JGB curve has shifted down since the last FOMC meeting. One factor that has continued to work in favor of Japan's export sector has been the exchange rate. The yen's nominal value has been falling against most currencies in recent weeks and hit its lowest level against the euro since the single currency's launch. The middle panel takes a much longer perspective on the yen; it graphs the real effective exchange rate since the beginning of the floating rate era. The real effective rate has been falling steadily since 2000 and is at its lowest level in more than 20 years despite the chronic trade and current account surpluses that Japan has generated in the interim.

The bottom two panels on page 3 reflect the recent volatility in commodity prices, with metal prices on the bottom left and energy prices on the bottom right. Metal prices continue to fluctuate but show some signs of having topped out for the time being. Energy prices, however, have made a round trip from where they were at the beginning of the year. The retracing of prices has fed discussions about whether the so-called speculative premium in energy prices has now been taken out. Certainly there are signs that speculators have been exiting some of these positions. Those signs are most visible for natural gas, which is something of an outlier in the bottom right. Last week's sharp decline in prices may have been related to the liquidation of positions by the large hedge fund that was closing out positions. If the speculative money is being chased out, for natural gas but also for other products, then perhaps energy prices now better reflect underlying fundamentals.

Finally, I want to come back briefly to a topic I mentioned at the last meeting related to the nascent development of an early-return fed funds market. As background, fed funds contracts do not generally dictate the timing of the return leg. So, not surprisingly, most fed funds are returned to the lender late in the day. The GSEs have been interested in developing an early-return facility to meet the principal and interest payment timetable given the new PSR (payment system risk) rules. The data are sparse, and our conclusions are tentative, but I wanted to give you a brief update. On page 4, the blue bar in the top panel graphs daily volumes of regular overnight fed funds contracts. The smaller green bar represents overnight early-return volumes. The black line shows the percentage of overall volumes represented by early returns. The time series starts on August 8, which is when data first became available to us. This series does not include term trades with early-return provisions. In general, early returns make up about 10 percent of overall volumes. The middle panel graphs the effective rate for those trades with early-return provisions in red. The blue line is the 9:00 a.m. rate. Early-return trades are transacted in midmorning and thus show a strong correlation with the 9:00 a.m. rate, generally trading about 2 basis points below regular funds. Finally, as shown in the bottom panel, early-return trades have far less volatility. The reason for the lower volatility is primarily that these trades are executed in midmorning rather than during the late afternoon rush, when the funds rate often can move with large swings. Getting back to the GSEs, they in fact have not been active users of overnight early-return fed funds. They have, however, used term fed funds of up to a month maturity with early-return provisions timed to mature on the date of their large P&I dates. For term rates, unlike for overnight trades, there is no rate concession.

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

CHAIRMAN BERNANKE. Thank you. Are there any questions for Dino? President Poole.

MR. POOLE. Does the early-return rate enter into the calculation of the effective rate for the day?

MR. KOS. Yes, it does.

MR. POOLE. It does, and therefore it affects the futures market trading.

MR. KOS. Yes, it does affect it. Now, the effect that it has is fairly small—I think it's less than 1 basis point overall.

MR. POOLE. But should that volume rise, it could become quantitatively significant.

MR. KOS. That's correct—it could. Again, despite forecasts by some traders and brokers in the market, so far that has not happened. In part, it's because the GSEs have been using term fed funds more than overnight funds for cost reasons.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. About early returns, obviously what we care about as a Committee is the 24-hour rate. Therefore, in calculating and targeting that effective rate, if that spread became substantial, we'd want to adjust for that, I would take it. The spread between the early return and the regular 24-hour return is so small that the implied intraday rate in some sense that you calculate is not even close to our daylight overdraft charges—right?

MR. KOS. I haven't made that precise comparison, but in general I would say that where you started out was perhaps the most interesting part, which is that the Committee cares about the 24-hour rate. Now, that's something that I'm not aware has actually ever been articulated before. What has been articulated to the Desk has been the overnight rate, whether that period is 24 hours, 16 hours, or some other time. We have thought about the question of whether the early return should be excluded, and so far we have been analyzing it by tracking the data and trying to understand what effect it has. But if the Committee feels that it should be the 24-hour rate rather than something else, then that consideration will have to be taken up separately.

MR. LACKER. From the economic standpoint, clearly we care about the 24-hour rate. But if the intraday rate rose, and so for a given 24-hour rate the effective overnight rate was lower, that would really distort the relationship between the effective rate and the longer-term real intertemporal rate of substitution.

MR. KOS. Just to be clear, right now there isn't an intraday rate. This is an overnight rate, and the way that it works out, it really is roughly a 24-hour rate because most of this trading takes place in early morning to midmorning.

MR. LACKER. Even with the early returns?

MR. KOS. Yes, most of the trading occurs between 8:00 and 9:30 in the morning. It's an early morning market for trading, and it's an early morning market for returns. So it actually does end up being roughly a 24-hour market. It's just that the trading takes place at a different part of the day.

MR. LACKER. I see. But do you think of the difference as a risk premium?

MR. KOS. No, I don't think it's a risk premium. It just reflects the 1 or 2 basis point differential for the bank. It just changes their procedures, so it adds to their costs in terms of returning funds earlier and not having additional funds to use for making other payments. Therefore, the bank may hit against its cap earlier in the day. So there is an economic cost, but it doesn't seem to be a huge one.

MR. LACKER. When you say "the bank," which side are you talking about?

MR. KOS. The bank that's returning the funds.

MR. LACKER. Okay. So they're giving up something. I have a second question I want to ask about inflation compensation. The chart you have in the front shows that inflation compensation has fallen at the front end. Yet in the Bluebook box on page 4, there's a calculation done from the near-term maturing TIPS security showing that, from October/November '06 to October/November '07, inflation compensation has not changed much at all. Do you have a more-detailed sense about at what part of the curve inflation compensation has come down?

MR. KOS. At the short end, it's going to be affected by energy, right?

MR. LACKER. Right. That shows up in the Bluebook as from now to October/November '06, and that you would think of as a sort of expected carry effect.

MR. KOS. Yes. Energy prices will tend to have a bigger effect during the first two or three years of a TIPS curve.

MR. REINHART. President Lacker, the thing to point out in the staff forecast for CPI inflation is that they are forecasting declines in the CPI in September and October. That's reflected in the shift in the bars at the left in that box in the Bluebook. So it really is at the very front end.

MS. MOSSER. The numbers in Dino's chart are breakevens, so there were no carry adjustments. Therefore they're not the same as the calculations in the Bluebook, which include a lot of adjustments and are implied inflation numbers. These are purely the differences between the nominals and the reals. One reason that we always include the five-year five-year-forward breakeven rate is that it is the forward that is easiest to calculate—but where energy prices and carry have the smallest effect. So if you want to get the clearest reading from pure market data, it would be the five-year five-year-forward rate.

MR. LACKER. I understand and appreciate that. Thanks. My impression, however, is that you have something near term going on because of what is expected to happen to the headline CPI over the next couple of months. Then something a couple of years out, not next year but a year or two after that, is pulling down the compensation. Is that a fair characterization of the market data?

MR. KOS. I would not be so bold as to go that far.

MR. LACKER. Let me see if I can get Vince to be that bold. [Laughter]

MR. REINHART. Yes. There is something happening at the near end. [Laughter]

MR. LACKER. That's not very bold, Vince.

MR. KOS. I was willing to go that far. [Laughter]

MR. REINHART. Also, look at the relative movement. The first five years it's moving in a much wider range. The five-year five-year-forward rate has come down a bit but really not a lot.

MR. LACKER. But the near-term five-year looks as though it changed because of the next couple of months and then after ’08 and not much in ’07. You’re okay with that interpretation?

MR. REINHART. I’m okay with that interpretation.

MR. LACKER. Okay. Thank you.

CHAIRMAN BERNANKE. Vince, you gave me a number for two-year breakevens of 2.14 percent carry adjusted. How does that relate to these numbers?

MR. REINHART. That was the forward rate.

CHAIRMAN BERNANKE. The two-year breakeven rate, carry adjusted?

MR. REINHART. Right. The numbers in the box are the twelve months ending in October and November, and they’re not carry adjusted. They’re straight reads from that portion of the differential between the two yield curves. So there are two things going on: the shifting in time and the carry adjustment.

MR. LACKER. Well, the carry adjustment doesn’t affect the October ’06 calendar-year spread, nor would it affect the two-year forward rate.

MR. REINHART. If it was a forward rate, yes.

CHAIRMAN BERNANKE. Are there other questions? Governor Bies.

MS. BIES. Can you go back to the GSEs’ use of the early return? You said they’re using the term fed funds but not the overnight. So who is using the overnight early returns?

MR. KOS. That’s a great question. It’s not clear. It seems to be a wide range of institutions. I don’t know that we’ve seen a distinct pattern yet. Again, the sizes are pretty small as a percentage of the overall market. I’m not quite sure why it’s being used or whether the banks are using it. There must be some cash-management aspect for which some banks are using it; and perhaps some customers, for whatever reason, are interested in getting funds back early. But I think this is one thing that we need to understand better and one thing that we'll be looking at in the coming months. It's a good question. I wish I had a good answer for you.

MS. BIES. Well, I'm just glad you're gathering the data.

MR. LACKER. May I just follow up? Compared with the early return, the regular fed funds loan is a 24-hour loan plus an option to extend it for a few hours. It's an option—you could use it or not, right? So from that point of view, if what we wanted to get a bead on was the risk-free 24-hour rate, then it looks as though the early return might be the one we'd want to target rather than the other—assuming that the market is liquid enough to do that.

MR. KOS. Well, the early return has to be returned early in the morning. Also, we know anecdotally, and the data seem to support it, that most of that trading takes place roughly 24 hours before delivery. Now that's a characterization of a very small segment of the market. To have a true 24-hour market, you would have to presume that 10:00 a.m. trades are returned by 10:00 a.m. the next day and 11:00 a.m. trades by 11:00 a.m. the next day. That's a level of exactness that I'm not sure can be replicated—or monitored, for that matter.

CHAIRMAN BERNANKE. Do you have a question? All right. We need an action to ratify the open market operations. Do I hear a motion?

MR. KOHN. So moved.

CHAIRMAN BERNANKE. Approved, without objection. Thank you. Let us turn now to the economic situation. Dave?

MR. STOCKTON. Thank you, Mr. Chairman. I cannot recall the precise baseball analogy employed by David Wilcox at the last FOMC meeting, but I have a vague recollection he speculated that I was either due for a forecasting hit or due to be hit by the forecast. [Laughter] In any event, since the Greenbook was completed last Wednesday, we have made several trips to the plate with consequential economic statistics on the mound. And how is the team doing? I guess I'd say, better than the Washington Nationals, not as well as the New York Mets.

Last Thursday, we received retail sales figures for August. As you know, we focus on the retail control component of spending, which strips out sales at auto dealers and building material and supply stores. The August increase in this category was 0.2 percent, a bit stronger than we had expected. But both June and July were revised down, and on net these data were a touch weaker than those incorporated in the September Greenbook. Retail inventories for July also were a bit below our expectation. Housing starts for August were released yesterday. In line with our forecast, single-family starts dropped nearly 6 percent, to 1.36 million units, and the permits data point to some further declines in the months ahead. But multifamily starts declined somewhat more that we had expected. If we had to redo the forecast today, we would probably lower the increase in real GDP in the second half of this year to 1½ percent at an annual rate.

Last Friday's report that both headline and core consumer prices increased 0.2 percent in August was right in line with our forecast. The major components of yesterday's PPI actually came in below our expectations, most especially the core finished goods index, which declined 0.4 percent in August. The only sour note was an increase in the PPI for medical services. The PPI for medical services is used by the BEA in constructing the core PCE price index, and it caused our estimate of core PCE prices for August to revise up from a high 0.2 percent to a low 0.3 percent.

All in all, however, the incoming data over the past week left our forecast pretty much unscathed. I am relieved about that, because, if I do say so myself, it's a beautifully constructed forecast. [Laughter] After all, with no further tightening of monetary policy, the economy eases into an extended period of slightly below-trend growth led by a retrenchment in the housing sector. That slower growth of activity opens a small output gap by the middle of next year but does not trigger a more precipitous cyclical contraction. Then, as the downturn in housing wanes and the associated multiplier and accelerator effects largely play out, the growth of real GDP picks back up toward potential in 2008. Meanwhile, the output gap that develops over the next year or so, in combination with inflation expectations that remain well anchored and a near flattening out of oil and other commodity prices, is projected to impart a mild tilt down in core inflation—to 2¼ percent in 2007 and 2 percent in 2008.

So, what should you make of this forecast? Is it a construction as elegant and durable as say the Eiffel Tower in Paris, or is it more like the Eiffel Tower in Las Vegas—it looks pretty good a few blocks away but isn't that impressive upon closer inspection? [Laughter] In that regard, you could not be faulted for wondering whether this forecast represents our averaging of two possibly more plausible outcomes that we simply didn't have the courage to choose between.

One view could be that this forecast is far too pessimistic. After all, our projection for growth in the second half of this year and in 2007 is now well below the consensus. Most of the available measures of aggregate activity remain solid. Real GDP is estimated to have increased 3½ percent over the year ending in the second quarter, about in line with its pace over the past several years. More recently, despite some notable month-to-month swings, manufacturing industrial production is up at a 5 percent annual rate over the three months ending in August. An even more timely economic indicator, the level of initial claims for unemployment insurance, has moved sideways through the middle of this month and does not yet suggest any inflection point in activity. Moreover, oil prices are down, the stock market is up, and financial conditions in the corporate sector remain favorable. These developments could cast doubt on our projected slowdown in real GDP.

The other view might be that our forecast is too optimistic. Cyclical contractions are often precipitated by large imbalances in the economy that cause a great deal of pain and extensive damage when they get rectified. Certainly, housing is looking increasingly like a sector that could play that role. Starts and sales have dropped sharply in recent months, inventories of unsold homes are still soaring despite cutbacks in production, and prices are rapidly decelerating. This jolt is occurring while households are still dealing with the substantial hit to their purchasing power from the higher energy prices that they have encountered over the past several years. Yet all of this results, in our forecast, in only a very modest and gradual rise in the unemployment rate over the forecast period.

I must admit that there were times over the past several weeks when I felt as though I'd seen this forecast before—specifically, in the summer of 1990 and in the autumn of 2000. At those times, the staff saw that forces of restraint were in place, and we projected a noticeable shortfall of growth from potential. But we failed to anticipate much in advance the impending cyclical downturn in the economy—and I doubt that we will when such an event occurs again in the future. I can assure you that we spent a great deal of time examining both of these possible critiques of our forecast, but in the end, we still view something like our projection as more likely than either of these two alternatives.

So let me lay out the logic of the forecast and along the way address some of these concerns. As I noted earlier, we are now projecting the growth of real output in the second half of the year to be around 1½ percent at an annual rate, about ½ percentage point less than in the August Greenbook. The lower scheduled vehicle assemblies announced by the automakers were part of the downward adjustment. But the major source of the projected weakness in aggregate demand lies in residential construction, which is now expected to lop off nearly 1½ percentage points of growth in real GDP in the second half.

If it doesn't really feel to you like an economy that is growing as slowly as 1½ percent, there may be a good reason. Our assessment is that, except for the housing sector, the economy is growing at a pace of roughly 3 percent. So far the collateral damage from the downturn in housing has been limited, and for the most part, we expect it to remain that way, at least for a time. A pickup in nonresidential construction activity has offset some of the weakness in residential construction. Moreover, the recent declines in energy prices seem likely to cushion some of the near-term effects of the housing contraction by restoring some lost purchasing power to households and by helping to support consumer spending. With overall business sales holding up reasonably well so far, the cost of capital still low by historical standards, and financial conditions solid, outlays for equipment should move forward at a fairly rapid clip for the remainder of the year.

But it seems implausible to us that the downturn in housing will not have multiplier-accelerator consequences that hold down growth going forward. Along those lines, we expect employment growth to slow more noticeably by the end of the year. Slower job gains and a further deceleration in housing wealth should damp consumer spending as we move into next year. The result is a steady, though gradual, rise in the personal saving rate over the next two years of about 2 percentage points. With the usual lags, slower growth of sales and output cause a mild deceleration in equipment spending. At the same time, fiscal policy is becoming progressively less stimulative over the forecast period. These forces are attenuated, but not offset, by the boost to spending generated by a higher estimated level of labor income and by a lower trajectory of consumer energy prices in this forecast. All told, we see these influences as likely to hold the growth of real GDP below potential over the next two years.

Still, we are not anticipating the weakening in activity to cumulate into outright recession. In our forecast, the fact that the implications of the housing downturn for the broader economy are relatively limited rests importantly on two suppositions, both of which are open to question. The first is that the slump in housing produces a sharp slowdown in house prices but not a large nationwide decline in those prices. In the past, housing prices have been relatively sticky on the downside, with homeowners resisting price cuts and keeping their homes on the market longer. Our forecast envisions something similar occurring in this episode. The second assumption is that housing wealth affects consumer spending like other forms of wealth and that there are no other channels of influence of house prices and housing finance on consumption. For example, we have not incorporated any significant negative effects on consumer sentiment that might accompany a rapid deceleration of house prices. We have also made no special allowance for the decline in mortgage equity withdrawal to restrain consumption because we find the empirical evidence of such a connection to be fragile. Previous Greenbook simulations have demonstrated that turning on any of these channels would amplify the effects of a weak housing market on the aggregate economy. Their absence in our baseline forecast is one of the reasons that the economy bends but doesn't break in response to our projected housing slump.

As you know from reading the Greenbook, not all of the action was on the demand side of our forecast. In fact, we revised down aggregate supply by virtually the same amount that we revised down aggregate demand, leaving the output gap nearly unchanged from the August Greenbook. I would not be surprised if some of you were suffering a little reverse “sticker shock” from the low rates of GDP growth that we are now projecting, much of which can be traced to the downward adjustments that we made to potential output in each of the last two projections. The growth of potential is estimated to be about 2¾ percent this year and next and 2½ percent in 2008. Although we still could be characterized as productivity “optimists” with our projection of gains in structural productivity of 2¾ percent per year—a figure that is above many of the outside forecasts that we monitor—we are increasingly looking like potential output “pessimists” because of our expectation of only meager gains in available labor input. As you know, we are projecting a steepening downtrend in labor force participation and a slowing in the working-age population as the front edge of baby-boom retirements arrives late in the projection period. Our views are significantly below the consensus here. However, as we have noted in the past, if potential GDP ultimately proves stronger than we are forecasting, actual GDP will likely be stronger as well. So to a first approximation, the GDP gap and the assumed accompanying path of the funds rate would be largely unaffected by errors in our forecast of potential labor input.

Much like the real side of the projection, our inflation forecast had some large moving pieces that, on net, left us pretty much in the same place as our August projection. On the favorable side of the ledger, oil prices are projected to average around $10 per barrel below our previous forecast. Taken in isolation, this development would have led us to revise down our projection of core PCE prices about 0.1 percentage point next year. But there was news on the unfavorable side of the ledger as well. On the basis of unemployment insurance tax records, the BEA revised up the growth in hourly labor compensation to an annual rate of 13¾ percent in the first quarter of the year. Once again, we are confronted with a huge difference between the signal provided by nonfarm business compensation and the employment cost index (ECI) measure of compensation, which increased at a rate of just 2½ percent in that quarter. Such wild discrepancies have led some inflation forecasters to employ reduced-form price equations that circumvent measures of labor compensation altogether. We are sympathetic to that approach, and those types of models are in our stable of forecasting equations. But we think it unwise to ignore entirely the issue of labor costs, given that they constitute two-thirds of business costs.

So what do we make of this first-quarter jump in hourly labor compensation? As you know, one of the principal differences between the two major measures is that stock option exercises are included in the nonfarm business measure of hourly compensation but not in the ECI. Our colleagues at the New York Fed have been monitoring data on option exercises by company insiders, and those data suggest that an outsized jump in exercises in the first quarter probably helps to explain an appreciable fraction of the jump in hourly compensation. But that doesn't seem to be the full story, as wages and salaries were revised up in categories, such as construction, where options probably do not figure prominently in employee compensation. In our forecast, we have assumed that stock option exercises and other nonrecurring nonwage payments provided a temporary boost to the level of income in the first quarter, about half of which will be reversed by the third quarter.

What about the consequences of these higher measured labor costs for prices? Models that take the data simply at face value want to revise up the forecast of core consumer price inflation forecast between ¼ and ½ percentage point in 2007. However, these data should not be taken entirely at face value, at least as a measure of incremental business costs. As we have argued in the past, option exercises are not likely to represent a marginal cost of production and, at the very least, are probably misleading with regard to the timing of any such cost increase. Thus we have discounted the price implications of the first-quarter surge in compensation per hour, adding just a tenth to our inflation forecast for this factor. This exactly offsets the negative effects of the lower energy prices and leaves our projection of core PCE inflation unchanged at 2¼ percent in 2007.

After that, a further waning of energy and other commodity cost pressures, the emergence of a small output gap, and the assumption that long-term inflation expectations continue to be reasonably well behaved cause inflation to drop to 2 percent in 2008. In that regard, the better core inflation figures of the past two months, the fall in oil prices, and the drop in various readings on inflation expectations over the intermeeting period provide us with some encouragement that inflation pressures will gradually fade over the projection period. But we would hasten to note that none of these developments cinch the case that we have turned the corner on inflation. Karen will continue our presentation.

MS. JOHNSON. In the international economy, the striking development over the intermeeting period has been the rapid and substantial drop in crude oil prices and in prices for some nonfuel commodities. The spot price of WTI crude reached a recent high of about $77 per barrel on August 7, following news of problems with the BP pipelines at Prudhoe Bay. Since then, it has declined to less than $62 in trading yesterday, decreasing about $15 per barrel. The far futures price is down somewhat less, nearly $10 per barrel, leaving a barrel of WTI crude for delivery in 2012 priced about the same as a barrel of crude in the current spot market.

As has been our practice for many years, we have assumed for the Greenbook baseline forecast that oil prices over time will match those contained in the futures price curve that held when we finalized the forecast last week. The timing of our forecast this Greenbook and last and the smoothing from quarterly averaging results in our forecast path for the oil import price shifting a bit less than did the spot price of crude. The downward revision in the oil import price amounts to nearly $12 per barrel in the near term and narrows to somewhat more than $8 per barrel by the end of 2007.

Some other commodity markets were remarkably volatile over the intermeeting period as well. The spot prices for gold declined more than $60 per fine ounce since the time of the August FOMC meeting. Many of the industrial metals also moved down sharply in the past week or two, but in some cases these declines merely retraced run-ups earlier in the intermeeting period and resulted in only small net changes.

Regarding the implications of the lower oil prices for our forecast, it is helpful to remember that our assumed price for WTI crude in the fourth quarter is near, but still more than $1 per barrel above, the average price that prevailed in the first quarter of this year, when we regarded oil prices as very elevated. In addition, the forecast path for WTI now rises into 2007 and then is about flat at close to $70 per barrel through the end of 2008. It also is relevant for constructing the forecast to ask why oil prices have come down as they have. The new developments that triggered the reaction in market prices seem to be importantly about the risks attached to future supply. Some aspects of geopolitical tensions, such as the conflict in Lebanon and the ongoing dispute with Iran over its nuclear program, seem to have eased. The Atlantic Ocean hurricane season has pleasantly surprised, with fewer storms than previously expected and none so far threatening the Gulf of Mexico. One factor that likely influenced the price reaction to the apparent lessening of risks to supply is the high level of inventories of crude oil at the present time. Current demand and supply plus market expectations of future demand and supply combine to determine spot and future prices plus desired inventories. With inventories already high, news that future supply is less uncertain sharply lowered the price required to clear the spot market and the premium that buyers are willing to pay to ensure future access to oil. Nevertheless, the positive slope to the futures curve over the forecast period suggests that, on balance, market participants are not expecting future supply to be as abundant relative to demand as is the case currently.

With respect to the implications for our forecast of foreign growth and inflation, we needed to consider the direct effects of lower energy prices and also to ask whether actual or prospective slowing of global economic activity and, hence, demand for oil and other primary commodities have contributed to the downward shift in these prices. On balance, our outlook for real GDP growth abroad generally remains quite strong. However, we do expect a decrease in the average rate of growth of foreign real GDP from about 4 percent at an annual rate in the second quarter to 3¼ percent in the second half of this year and over the remainder of the forecast period. In both the industrial countries and the emerging-market economies, the pace of real growth was particularly vigorous during the first half of this year and contributed to continued strong demand for oil and other commodities. Monetary policy has been tightened in response to concerns of inflation and overheating in many countries, measures to tighten fiscal policy have been passed in some cases, and officials in China have imposed additional administrative measures to restrain growth. Prospective moderation of the rate of foreign growth was a feature of our forecast in August. Data from Canada and Japan already provide evidence of a lessening in the rate of growth in those countries. However, available data on activity in the euro area, China, and Mexico continue to be buoyant.

In putting the pieces of the forecast together, we have concluded that the lower oil prices are consistent with overall foreign growth remaining moderately strong and will help to ensure that it remains so. At the same time, the projected pace of global economic activity is consistent with oil prices remaining quite elevated and rising somewhat into next year. We judged that the implications for foreign growth of the downward revision to the outlook for U.S. real output growth were partly offset by some boost to foreign growth that we otherwise would have incorporated in response to the reduced energy costs, although these factors differ across countries. As a result and given data received since the August forecast, the path for foreign real GDP growth was little revised on balance from that in the previous Greenbook.

We have revised down our forecast for headline consumer price inflation abroad a few tenths for the second half of this year and next as a consequence of the lower path for energy prices. We project that in the industrial countries other than Japan inflation will move down somewhat over the forecast period. In contrast, Japanese inflation is expected to edge up but to remain below 1 percent. Some emerging-market economies in Asia still have controls on or subsidies of domestic fuel prices, which delays any pass-through of higher energy prices into domestic inflation. Accordingly, we project that increases in global oil prices earlier this year will push inflation in emerging Asia temporarily above 3 percent during the first half of next year. We look for inflation in Latin America to remain contained near present rates.

We see the risks to this forecast in many respects as balanced. We have been surprised on the upside by the strength in foreign real activity during the first half of the year, and strong domestic demand in some regions could push off into the future some of the slowing that we are projecting. Alternatively, foreign activity may be more sensitive to the U.S. slowdown than we currently envisage. We feel especially uncertain with respect to the outlook for oil prices, given market reaction to recent events; the sharp change in prices caught us and the futures market by surprise. Although we are once again assuming that oil prices will follow the path implied by futures prices, we recognize that a much larger move up or down is quite possible. David and I will be happy to answer any questions.

CHAIRMAN BERNANKE. Are there questions? President Fisher.

MR. FISHER. First, I want to congratulate David on the excellent memo on inflation dynamics, and I hope that we can circulate it more broadly to the academic community so we can enrich that debate. It was a superb paper. Karen, you know how much I appreciate your comments on the inflation dynamics that you're seeing in other countries. I have a question on that front—really two questions.

First, in listening to the people that we talk to in the energy business, whether it's Lee Raymond or all the operators of the various companies from Exxon down to the smaller ones, I still hear the issue of how much of this price reversal—just as there was an issue of how much of the price increase—derives from speculative activity, nonphysical demand. To summarize what I heard over the past week or so, my contacts assert that the speculators have shifted to the short side of the boat—so that we have seen this tilt. I'm wondering how much influence you ascribe to speculative activity as opposed to physical demand and supply activity. I know we've had this discussion before, but has speculation accelerated the downturn, or is there something else at play?

MS. JOHNSON. To be honest, I don't know of any real data that the staff can bring to bear on this question. We have some data on the trading contracts and who is trading, and to some degree these data may shed light on a measure of how much of the trading is fundamental and how much of the trading is, for want of a better word, speculative. But that's just nonfundamental traders, non-end users. I don't know that such knowledge would tell you how much of the price change is due to which sort of activity. My remarks this morning attempted to highlight the fact that the endogenous part of this behavior is the price structure and the inventory behavior that emerge. I think that there was an interaction in those things, although as yet we don't have real formalized models of inventory behavior that I want to claim any systematic truth about. But I think that the volume of trading and the volatility it might induce in prices does feed back to demand for actual physical product through the behavior of inventories. So although it's also true that the speculative traders are adding to the upside and the downside, they are eliciting a response from the oil producers on the one hand and, to some degree, from the oil consumers on the other to change their inventory behavior. That also feeds back on how the price dynamics work. Right now, I think basically they are providing liquidity to this market, but they may well be amplifying the swings—but I can't put a number on it; I really can't.

MR. FISHER. Maybe Dino can add something?

MR. KOS. There's probably some short-term effect. I think there may be something to what you suggest, but my own assertion is that it would probably have a short-term effect on prices. Whether that's a matter of days or weeks or maybe longer, it's hard to put a time dimension on it. I was trying to make the point in my remarks, especially about natural gas, that most people just assume that last week's price movements in natural gas—I believe a very sharp drop occurred on Thursday—were related to the closeout of some of these positions from the one hedge fund, and the presumption is that other hedge funds that made money in energy earlier this year were also getting out of some of these trades. So that would support what you were saying. Now, whether that element has an effect on prices for a week or two weeks is very hard to know, but it probably does have some effect. I think Karen is probably right in the sense that over the long term there are inventory effects, and at some point, those speculative effects get washed out.

MR. FISHER. Well, again, it's just something I'm interested in. It's not unimportant, but I have a more important question. Karen, I noticed last week that the International Monetary Fund forecasts global economic growth, non-U.S. growth, of around 5 percent. Our number is 3¼ percent. What is the difference between us? If we're underestimating, what would be the policy implications?

MS. JOHNSON. Part of the difference is the weighting that they use. First, our number is total foreign, whereas their number is world. However, the U.S. numbers are probably below average. If anything, we should go the other way, although in the past it has worked my way. [Laughter] Second, we use weights based on U.S. export behavior. We're trying to construct a variable that we're going to then put into an equation or use in thinking about the volume of U.S. exports. They're describing global economic activity. So they tend to use GDP-type weights, and we use U.S. export weights. That puts a lot of weight on Canada in our number, and Canada is on the lower side on growth, relative to the average. In their case, especially if they use PPP (purchasing power parity) weights—and I believe that they do in most of the numbers you see—that puts a lot of weight on China and China's growth and more weight on China's growth than we put. That raises their average. Thus, some of the differences are due to differences in weights.

Nonetheless, there is a real country-by-country difference in that we are on the low side of their numbers—for example, for the euro area and certainly for the United States, although the United States isn't in our total foreign number. But were we going to put it in and mentally calculate some kind of average, the United States would be a part of that story, and Europe would be another part. I guess maybe we're just reading the current data a little differently. We're not as persuaded that Europe is really going on a sustained growth episode. We have Japan doing fairly well, but we have numbers in the ones and not any higher. So I think we are a little bit less optimistic, if that's the word, about the pace at which foreign growth will continue. We see the monetary policy actions that people have taken, we see the slowdown in the United States, and we've got a slower picture for the rest of the world.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. I have an observation and a question. Your outlook for employment is growth at just 25,000 per month. If that's what we're going to see, we're going to have a major communication challenge to explain it because it is going to look and feel like a recession to almost everybody who sees those numbers. However, you don't have a recession; you have continuing slow growth. So that's just my observation.

I have a question about the alternative simulations and the market-based funds rate. If I understand what you do, you have your baseline forecast, and then you just impose a lower funds track, and that yields higher growth. Another way of looking at the market-based funds rate is essentially to invert the Taylor rule and say how weak economic activity would have to be for the Taylor rule to lead us to cut rates. In that case, particularly if you take a version of the Taylor rule that has a lot of interest smoothing in it, it takes a lot of downside surprises, some combination of activity and prices, to get us to reduce rates to match the market. I just want to throw out that observation and ask whether you have any response to it.

MR. STOCKTON. Viewed from the appropriate perspective, 25,000 per month is not too bad—viewed perhaps from the perspective of the Administration of Millard Fillmore. [Laughter] So I will readily acknowledge that, if we're right about our labor input forecast, there will be some communication difficulties, and there will be maybe even more political consequences in some sense than underlying economic consequences. A number of you noted, and I think the Chairman noted in the testimony or a speech, that marking down of our expectations for what would be good underlying employment growth. I've also been surprised in the past few months. If you had told most economists or market commentators earlier this year that 100,000 a month was going to be a good employment figure, it would have come as a real shock. Yet there has been, I think, a marking down of expectations for employment growth in that the recent figures, when they come out at 111,000 aren't viewed as devastating.

MR. POOLE. But there's a big difference between 100,000 and a quarter of that number.

MR. STOCKTON. I completely agree. As I indicated, this piece of our forecast does make me nervous because we are far out of the consensus, especially in our expectation for the decline in labor force participation. I'm actually a little less nervous than I was a year and a half ago, when we first moved to this change in our forecast, because at the time a very big question was whether there was going to be a large pool of underutilized and unutilized workers who would come back into the labor force as the unemployment rate came down. When the unemployment rate came down, the labor force participation rate—pretty much as we had expected—moved sideways. So I feel a little more comfortable than I did earlier about this piece of our forecast. But any time you are this different from everybody else, you need to be reasonably humble.

As far as your observation about the market-based funds rate simulation, I think you are absolutely right. A different way to interpret it is to try to understand what the markets are telling us about the economy. I would also point to another alternative simulation that I think goes a bit in the direction that you're suggesting—the "less inflation persistence" simulation, in which inflation comes down more rapidly and, in essence, allows the Fed to lower the fed funds rate more significantly than we're assuming in the baseline in a way that's not that different from the market's expectation for the funds rate. Now, that's one possibility, or it could be some combination. The market could be looking at some combination of a little less persistence of inflation and maybe a little weaker outlook for activity, although I would wonder about the weaker market interpretation. Looking at the full financial configuration, I don't see indications from financial markets that there's an expectation of a lot of financial stress on our doorstep. So I'm inclined to the view that they may be more in that "less inflation persistence" camp than in a "much weaker economy" camp.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Thank you, Mr. Chairman. Dave, I'm trying to understand your forecast and its evolution. As I read the Greenbook, at least on the demand side, it seemed to be largely a housing story as you cut through everything. So my question is, If I put myself back in August before I knew that incomes were going to be as high as they were, that energy prices were going to come down, that equity values were going to go up, and so forth, and I plug the current view of housing into that, what would it give me? I assume it would give me growth for the second half of this year at something close to maybe 1 percent and maybe growth next year of less than 2 percent. I know that there are a lot of moving parts, but anyway, that is the question. If we had known about housing and not plugged in this other stuff, where would we be?

MR. STOCKTON. I would say you have it just about right—somewhere on the order of 1 percent in the second half and something certainly under 2 percent in 2007. Obviously, in putting our forecast together we were contending both with weaker housing and with some of these offsets that we factored in that have provided some cushion to the downside surprise that we have had in housing through greater labor income, more purchasing power from lower energy prices, and a little higher stock market. In some sense, those effects get us back to just modestly below trend growth rather than significantly below trend growth.

CHAIRMAN BERNANKE. President Moskow.

MR. MOSKOW. I wanted to ask you about this "less inflation persistence" alternative scenario, which as you said brings inflation down to 1.6 percent by 2008. As I read the Greenbook and then the alternative simulation memo, I saw two things—(1) less persistence and (2) an expected inflation outcome of 1.6 percent. It seemed as though that outcome was built into the scenario; and I was wondering, given that we have had core inflation over 2 percent for more than two years now, whether that is a reasonable assumption to put in there. What would the outcome look like if you had built into that scenario an assumption of 2 percent instead of 1.6 percent?

MR. STOCKTON. Your 2 percent scenario is close to what we are forecasting in the Greenbook—inflation expectations running more like 2 percent than the 1½ percent, with less inflation persistence. You are right. We created a scenario in which, if you thought about some of the equation estimates that have been presented, persistence has fallen just about to zero, in which case inflation pretty quickly reverts to what its average has been over the past decade. That was the basis for the "less inflation persistence" scenario. We obviously don't think that is the most reasonable underlying assumption because we're not forecasting that outcome; but we do think that it's not entirely implausible and that you ought to at least have it on your radar screen as a possible outcome. It highlights some of the tension between the "less persistence" view of the world and the one in which we are expecting greater persistence.

MR. MOSKOW. So you assume that there is no inflation persistence and that we just go down to this longer-term average.

MR. STOCKTON. Well, by 2008. Some costs of adjustment slow that process, so you don't just jump immediately to the 1½ percent.

MR. MOSKOW. So it is just based on the assumption, and the key is that assumption of 1½ percent or 2 percent.

MR. STOCKTON. It is more than an assumption: It's an assumption that could be defended with some empirical evidence. Again, in some of these inflation persistence regressions in very short sample periods, there is evidence that the persistence has fallen very close to zero. Taken at face value, that could produce an outcome quite similar to what we are calling the "less inflation persistence" scenario. As you know from reading our memo, we do not think that is probably the best starting point for your consideration, but we do not think it is implausible or unreasonable.

MR. MOSKOW. Thank you.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. I would like to compliment you, David Stockton, and your staff for inclusion in this meeting's Greenbook, Part 2, on page II-36, of an array of measures of inflation expectations, apparently in response to needling from me. I can assure you that this will have no moral hazard effect, and you will get neither no more nor no less needling in the future than you would have. So this is not going to encourage more needling. I think that effort will help going forward, and I look forward to more steps in this direction. You just mentioned in response to President Moskow that close to 2 percent expected inflation underlies the Greenbook's baseline forecast, and that is useful information. I also want to compliment you on the documentation about inflation dynamics. I think that will be useful groundwork for us on the Committee. What I hope we do in the next year or so as part of the Kohn subcommittee deliberations on communications is to come to some understanding of how the pattern that guides our conduct—call it a rule or systematic component of monetary policy—relates to inflation dynamics and to discuss what inflation dynamics we want to bring about.

CHAIRMAN BERNANKE. Governor Mishkin.

MR. MISHKIN. First, on this issue of persistence, I want to mention that I think we should have some caution about interpreting the results. I do not quite know what the word "persistence" means because this is really a very reduced form estimate. A key issue is what mean it is that inflation is reverting to, and that can very much depend on what we do in terms of managing expectations. It is completely reasonable for you to have done the simulation that you call "less inflation persistence," but I might call it something different. So just I think that's important to think about.

What I would like you to do is to actually go a little beyond the forecast. I'd like to know what your thinking is on 2009, maybe 2010. I know you're going to be a little uncomfortable about doing so because there is clearly a lot of uncertainty. However, when I think about what the state of the economy is and how we should do monetary policy, we need to look at longer periods. So I am not going to hold you to it and say, "Gee, you have to be able to give us a great forecast," but I would actually like to know at least what your thinking may be on that issue.

MR. STOCKTON. I am flattered that you asked, given that I am still trying to figure out what happened in the first quarter of this year. [Laughter] So let me answer your question first and then provide some of the caveats or background. Basically, we do construct something we call a Greenbook extension that goes beyond the current Greenbook horizon of 2008. We do that for two reasons. One is that we have to forecast long-term interest rates, and we also have to be thinking a bit about where the economy is going, and we use that extension to help inform our thinking. We also use it in some of the analytical tools that we provide to the Committee, such as the optimal control exercises that we report from time to time.

There is a logic for the Greenbook's current forecast period: Most of what we are doing in macroeconomic forecasting is trying to get some purchase with a few gross correlations in the data and their dynamics, and a forecast period through the end of 2008 pretty much lets those dynamics play out. Beyond that, the Greenbook extension is what I call a model-informed construction. I had actually hoped a few years ago that we could start presenting this more frequently. My model staff wisely persuaded me not to do it yet. The reason is that the longer-run extension—for example, of what the equilibrium real rate is going to be in 2009, 2010, or 2011—in a model as large as FRB/US often changes for obscure reasons. For example, it may change when we re-estimate the energy production equation. In that case, all of a sudden we may get a ¼ point change in the equilibrium real rate that takes us a week to figure out why it happened, and ultimately the explanation would probably seem unsatisfying to you. We have been working on a project over the past year to systematize the rules that we use in constructing that longer-term outlook so that we could present it to you and have more confidence that when we do that we could both understand it ourselves and explain it to you. So I think what you are looking for is something that is high on our agenda.

Now, if we had to talk about 2009 and 2010, we are ending this forecast period with a modest output gap. That output gap would, all else being equal, be pushing inflation down from the 2 percent range with which we end up in this forecast to something below 2 percent. So you would be on track with that. But when you construct these longer-term ranges, the first thing you will encounter is the need for a dollar forecast. Over the length of the Greenbook period, Karen can talk about a dollar forecast that is roughly a random walk with a little bit of a nod in the direction of some depreciation. When we construct a ten-year extension of the forecast, we actually have to take a very precise stand on that. In these Greenbook extensions, right after the end of 2008, we basically have to build in something like a 4 percent real exchange rate depreciation of the dollar. Then in the extension, even though we are running with an unemployment rate of roughly 5¼ percent, we are not getting any further disinflation out of it because that output gap is just offsetting the inflation consequences of the anticipated dollar depreciation.

So if I were to characterize the forecast a few steps beyond the end of the current Greenbook forecast, it would be one in which you have a positive output gap, maybe a 5¼ percent unemployment rate, and not really making much progress beyond the 2 percent inflation with which we end the forecast period.

MR. MISHKIN. Thank you.

CHAIRMAN BERNANKE. President Minehan.

MS. MINEHAN. Thank you very much. Dave, I found your discussion of the averaging to be interesting—that is, the forecast is between the devil and the deep blue sea or, in effect, between recession or much slower growth on the one side and more inflation with perhaps higher growth on the other side. It reflects what I have been going through mentally and the discussion we had at some length with our staff in Boston yesterday.

Just focusing on the potential-for-recession side, when is it that we have had drops in residential investment such as the ones that you are projecting (which are quite unusual looking across the whole range of forecasts, particularly for this year) in the absence of a recession? I think the material from the briefings suggested that the drop is about the same as ’90-’91, which was a recession, and not quite as bad as ’80-’82, which was a big recession. When have we seen that outside a recession?

MR. STOCKTON. I think the answer to that is probably never in the post-World War II period. We also have not had a rise in the unemployment rate of ½ percentage point stretched out over a year, as we have in this forecast, without running into a recession.

MS. MINEHAN. That usually happens faster.

MR. STOCKTON. From our perspective—I haven’t said this in years, so I allow myself this one time—there is more uncertainty at this point. Both tails of the distribution feel wider to me than they have in the past. Now, my having said that, is it impossible to imagine that we could have something that we haven’t seen previously—a decline in housing of 20 to 30 percent and a modest rise in the unemployment rate? I think you would have to say that over the past six years the economy has shown remarkable resilience and an ability to absorb some pretty significant shocks without triggering a cyclical downturn. So it is not impossible for me to imagine that we will again in this period. Monetary policy is obviously not currently pushing hard into the cycle—that is, exacerbating the downturn as it was in the early 1980s. With the drop in energy prices and the generally sound financial conditions that we see in the corporate sector, there are some reasons for thinking there is a reasonably solid base upon which this shock is going to occur. But having said that, I think the situation is uncomfortable.

MR. WILCOX. The behavior of construction that we are projecting is unusual, but the predicate is also unusual in that we did go through a mild recession but with substantially no attenuation in the pace of construction. So it is an unusual path that we followed to get here, and in our baseline forecast, it is an unusual path that we follow going forward.

MS. MINEHAN. It is interesting that, when you plot out all the other major forecasts and you look at the underlying elements of them and you look at GDP, inflation, and so forth, the Greenbook is really an outlier on the low side in terms of growth and the fed funds rate. Maybe you are right. You have been here before as an outlier from the rest of the mainstream forecasts. I wish I had a good sense of how all of that worked out.

MR. STOCKTON. Sometimes right and sometimes wrong. [Laughter] I do have a sense of that.

MS. MINEHAN. I figured you might, you know.

MR. STOCKTON. Part of the difference stems increasingly from our more pessimistic take on potential output. Many of those outside forecasts have the unemployment rate rising to 5 percent, and we have it rising a bit more. Some of that difference is greater cyclical weakness that I would attribute to the depth of the housing downturn that we are forecasting. But some of it is just that we see potential output as very weak as well. That exaggerates or has the potential to create a

GDP illusion in comparing the forecasts, where we look much, much weaker even though our output gap isn't that much larger. For what it is worth, in the past week I have seen more people who do a serious tracking of the economy moving toward our outlook rather than away from it. So it wouldn't surprise me if more outside forecasters weren't showing not something as weak as maybe 1½ percent in the second half but something 2 percent or below.

MS. MINEHAN. One small thing. On the other side of the devil and the deep blue sea, there is such a sharp contraction of residential investment, which lasts basically for a year and a half—the forecast does attenuate the rate of decline into '07, but the contraction lasts pretty much a year and a half from where we are. Could it be faster? Could builders see that it is in their best interest to stop building now so that prices do not go down on new homes faster than they have gone already and inventories do not build anymore. Could that contraction be shorter, and could we come out of it faster?

MR. STOCKTON. The answer to that is "yes," and I think there is some risk. One feature of our forecast is the fact that we are not projecting large declines nationwide in house prices. We are expecting a deceleration but not any outright declines. One could imagine that more of the adjustment could take place more quickly by a big drop in house prices that in some sense clears out that inventory through higher sales and maybe less production adjustment. On that side, you would probably get a quicker housing cycle than the one that we are projecting. However, it also brings with it some downside risk in that households would realize how much their net worth had fallen, which could have consequences for consumption both directly through the wealth effect and perhaps through sentiment. That correction could be quicker and maybe deeper, but then the rebound could be faster. That is a risk we have certainly contemplated. We were a little nervous about being too adventuresome on the house-price forecasting. We are not very good at forecasting asset values, we never understood how prices got as far out of alignment as we think they are, and we are not sure exactly what the process of correction is going to look like. So we have taken a middle stance between two models: one model that basically forecasts house prices off pure momentum and another one that takes seriously the analytical apparatus, which we showed you a year and a half ago at our special briefing on housing, that looks at the error-correction process of house prices to rents. The latter model actually does forecast outright declines nationwide in house prices by 2008. We are between a momentum model, which expects house prices to slow less than we are forecasting, and this error-correction model, which shows bigger declines.

MS. MINEHAN. I was not really suggesting that there would be major price hits but only that the contraction that you are showing in the near term in residential construction might be enough, given mortgage rates, demographics, and those kinds of thing.

MR. STOCKTON. In some sense our forecast is below our models. Our models still say that the fundamentals in terms of cost of capital and income are reasonably supportive of residential investment. We thought we actually created some possibility of upside surprise with our forecast as well and not just downside in the adjustments that we made to our forecast.

MS. MINEHAN. That is exactly what I was trying to get at.

CHAIRMAN BERNANKE. If there are no more questions, we're ready for the economic go-around. For the benefit of our new member, the convention is that you raise one hand to be recognized and be put in the queue; if you have a comment or question, raise two hands for an intervention. I've noticed that there have not been a lot of two-handed interventions, particularly on one-day meetings, when we don't have much time. It is perfectly sensible to take account of the time, and that is fine; but if you do have an important intervention, by all means, don't hesitate. We start with President Poole.

MR. POOLE. Thank you, Mr. Chairman. I'm going to be quite brief. My contacts in the transportation industry are giving off some very mixed signals. UPS is investing heavily in capacity expansion. They have a problem in expanding capacity because they traditionally do it by buying used passenger aircraft. There are very few of these large aircraft around. They are expecting a busy holiday season.

My contact in the trucking industry says that his firm is now contracting. They have canceled orders for heavy trucks, the rest of them for delivery this year, and I found these numbers quite interesting. He gave me the heavy truck purchases; these are the big, over-the-road, heavy trucks. I will read you the numbers from 2003 through 2006: 2,825; 3,377; 2,424; and 2,672. Their planned truck purchases for next year are 250, and they have canceled the orders for the rest of this year. So the contraction is dramatic, and they have actually been reducing capacity.

My Wal-Mart contact said that it's a bit hard to read the most recent data. They work entirely on a year-over-year basis. Last year was heavily distorted by the hurricane season, and he said that the latest weekend was a bit disappointing. The paycheck cycle that they look at to understand their customers' liquidity situation is very muted, apparently with lower gasoline prices taking pressure off the budgets of many of their customers. He said that, for the first time he can remember, they have dropped the construction of new stores; they've actually canceled seven or eight projects because of high construction cost increases, which have been running in the neighborhood of 15 percent year over year. They are having no problem in finding labor, and he is not reporting any particularly great price pressures. I had already commented earlier about my concern about what these employment numbers are going to mean, and so I won't repeat that point. Thank you.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. My contact calls and director reports this round point to moderate growth in overall economic activity. Both nationally and in our District, housing is weak. Domestic auto production is slowing from last year, but activity in other sectors remains on a solid footing.

Starting on the downside, one of our Detroit directors from Pulte Homes characterized the slowdown in housing as broad and deep, and he said that they face a rocky road for the next year or two. With regard to motor vehicles, GM noted that their lower production in the fourth quarter largely reflected the retooling of five plants for their new truck platform, reduced low-margin sales to rental fleets, and lowered desired inventory holdings by dealers because of higher interest rates. Both GM and Ford are trying to reduce their reliance on sales to rental fleets.

In contrast, a wide array of capital goods manufacturers reported continued strong growth. The two major temporary help firms headquartered in the District pointed to modest but steady growth in billable hours. Importantly, no contact was worried about a protracted slowdown in the economy. Indeed, my directors were quite optimistic. This is an important change from six weeks ago, when we were hearing comments that the expansion had become long in the tooth and concerns that we were headed for a period of sustained weakness. This more upbeat assessment was in line with the sentiments I heard at the International Manufacturing Technology Show, which was held in Chicago earlier this month with over 90,000 attendees from more than 100 countries. Now, I did not have a chance to talk to all of them, [laughter] but the ones I did talk to were quite optimistic about increasing demand for U.S.-made high-tech capital equipment. The most amazing and impressive new technology that I saw was something that looked like a large ink-jet printer, but it spit out metal dust to fabricate intricate parts without traditional tools or dies. This was really quite unusual and impressive.

Turning to inflation, there was little change in most reports regarding price pressures. Labor compensation continued to increase at elevated rates. Our contacts from temporary help firms noted a further step-up in wages for highly skilled workers, whereas our retail contact said he was paying 8 to 10 percent more for entry-level sales personnel. Of course, the energy picture on the cost side looks better. Several contacts expressed relief at the recent declines and hoped that they would lead to reductions in fuel surcharges and related costs.

Turning to the national outlook, we agree with the Greenbook's assessment that growth in the third quarter appears to be somewhat weaker than we anticipated at the time of the August meeting. However, in contrast to the Greenbook, we do not think the sluggishness will persist for long. Current financial conditions do not appear to be a restraint on activity. Labor markets are in good shape, so growth in jobs and wages should continue to support household spending. We are getting a welcome boost to real incomes from lower energy prices; and given the increase in business optimism that I noted earlier, I am less concerned that cautious animal spirits will cause businesses to pull back on spending. Housing remains the major downside risk, but I get the impression that thus far the weakness in residential investment is not spilling over to the other sectors of the economy. Of course, we have talked about this at great length.

So our overall assessment is that by early next year growth will be much closer to potential than the Greenbook projects. Accordingly, we do not think that any meaningful resource gaps will emerge to restrain inflation. Indeed, our inflation models based on data since 1967 look for core PCE inflation to be 2.7 percent in '07 and 2.6 percent in '08. The models that use data only since 1984 come out somewhat lower, at 2.4 in '07 and 2.3 in '08.

In thinking about the differences between these forecasts, I found the background paper that Dave circulated quite useful, as several others have said. Our models allow for permanent shocks to the level of inflation, and as the paper noted, such shocks appear to have been much smaller since 1984. But as also discussed in the paper, we have no way of knowing whether these permanent shocks will be small in the future. I think the most likely interpretation of the reduction in the volatility of these permanent shocks is that policy has done a better job of anchoring inflation expectations. The public is more convinced than they were in the past that we will maintain low and stable inflation. But if our actions fail to confirm this belief, we would lose credibility, leading to higher inflation expectations and imparting more persistence to the current inflation shock. An inflation shock that is permanent rather than transitory is our responsibility.

Our forecasts remind me of this risk. True, so far this is just a risk. We have not yet seen any broad-based increases in long-run inflation forecasts by private-sector economists or in the five-year to ten-year TIPS inflation compensation. Indeed, TIPS have even moved down recently. This news is welcome. But even if inflation expectations have not moved up, another concern is the level of long-run inflation expectations—and I thought Jeff Lacker raised a good point last time in reminding us about it. Long-run inflation expectations of around 2½ percent for the CPI translate into a core PCE rate well above the middle of my comfort zone of 1 to 2 percent. Even the Greenbook expects core PCE inflation to be above 2 percent through ’08. I am concerned that even now the public could be questioning our resolve to bring inflation into what many of us have said is our comfort zone. I am already hearing this sentiment from some market analysts. Even without an increase in expectations, it is not clear to me that inflation will settle back to a level that I view as being consistent with price stability without further policy action.

CHAIRMAN BERNANKE. President Moskow, going back to the automobiles, you mentioned the retooling. The Greenbook has reduced production plans for the second half. Is that what you heard?

MR. MOSKOW. Yes, and Chrysler announced just yesterday that they, too, are reducing production in the second half. What intrigued me about GM, which has lowered production plans, is the changeover for light trucks. They are producing these trucks in five plants, and that is the largest number of plants that produce one type of vehicle. As a result, when they change these plants, they do it sequentially; the changeover slows production in that plant. Then they ramp up, and it takes some time to ramp up. Then they go to the next plant and do the same thing. So they are going through a series of five plants, and that in itself lowers their production in the fourth quarter. The other things I mentioned would lower it as well.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, the Eleventh District economy remains strong and continues to grow at a stronger pace than the rest of the country, with employment growth continuing at roughly twice the nation's pace. Incidentally, home sales have not turned down in our District, so we haven't been singing yet what we call the "coastal blues" as far as the homebuilding market is concerned. I think that's enough said about Texas and the Eleventh District.

I would like to talk about what I have learned this time from my usual soundings of some two dozen CEOs and CFOs. I have added a new one, by the way—the largest truck dealer in the country, which does $2.8 billion in sales of heavy trucks. Just as a footnote, what is driving some of what President Poole reported are the changes in emission standards that are being enforced as of January; other than that, they do not see much turndown in volume.

To summarize the reports of these interlocutors, I am going to borrow from Mark Twain's great quip about the music of Wagner. According to these business contacts, the outlook for economic growth is better than it sounds, whereas the dynamic of inflation is worse than it sounds.

Just a few anecdotes here for, if not similitude, verisimilitude. By the way, all the interlocutors are fully aware of the shape of the yield curve—these individuals are sophisticated—and they are especially aware of what is happening in the housing market. As one CEO told me, the only subject that has been more analyzed than the housing situation is the birth of Brad Pitt's baby. [Laughter] According to this view, if we have not discounted what has been happening in the housing market, we have been living on Mars, and I think that is an important point to take into account. If you remember, Dave, I have been more pessimistic than the staff in terms of the depth of the housing downturn.

Well, very quickly, according to the CFO of Frito-Lay, he and his counterpart CFOs in consumer goods companies do not see an appreciable slowing of growth from the second quarter to the third quarter. The CFO of UPS reports that, while business is tougher, third-quarter growth is running at a rate of 3 percent, the same as the second quarter, and their business projections indicate GDP growth "in the high 2 percent or low 3 percent area" for the rest of the year. The CEO of Burlington Northern Santa Fe reports that, despite a 17 percent year-over-year falloff in lumber shipments through last week, business overall "has actually firmed since the second quarter." From my usual report on the Panamax shipping charter rates, it is noteworthy that since our last meeting, when the round-trip booking rate was $23,000 a day, the rate has soared to $31,000 a day. By the way, the rates for carrying back finished products like steel from China, in the so-called handymax fleet, has risen to $27,300 from $23,000 a day, where it was at our last meeting.

All the retailers I talked to—from 7-Eleven to JCPenney to Costco to Home Depot—report that they feel that they have bottomed out and that things are picking up, with one exception. That exception is Wal-Mart, and I think some of that situation relates to the internal dynamics of the way Wal-Mart is positioning itself in the market. I think Bill's report was very accurate on Wal-Mart.

There are some tempering contra-indicators. The book-to-bill ratio for Texas Instruments and other semiconductor firms has fallen to 1 or slightly below, and advanced bookings for airlines are somewhat weaker. Herb Kelleher of Southwest Airlines, who has to be the most entertaining interlocutor I talk to, tempered that by saying when we met last time the advanced booking curve "index" was, say, 100. It has now eased to somewhere around 95—a noticeable but not dramatic drop.

The CEO of EDS summarized the growth side of the economy much as did the majority of the CEOs I spoke to for this go-round when he said, "We were all expecting things to be worse. They haven't gotten worse." They were all expecting things to get tougher, and they haven't gotten tougher, except for one area—the procurement of labor. There is a shortage of bank tellers and mechanics. By the way, a wrench bender, as they call the job in California now—a simple mechanic without the completion of a high-school diploma—gets $100,000 a year. There is a shortage of truck drivers, of oil field hands, of chemical engineers, and even of unskilled workers such as retail store cashiers in Houston; and for the first time I have heard from the major hoteliers of a shortage of hotel maids. To illustrate the point, one CEO mentioned that, whereas his company regularly used to get 300 applications for 100 truck driver jobs, they now get 3. So the bottom line is that our contacts are feeling more optimistic than the economists' forecasts. They are worried about some constraints on domestic labor. As one contact said, the economy feels like a full employment economy.

I want to spend just a minute on the inflation picture. I'm not going to go through anecdotes from the CEOs, though it pains me greatly as the son of an Australian to note that Anheuser-Busch has told its retailers that it is going to raise the price of beer 3 percent starting in January 2007. But I do want to explain why our board voted 7 to 1 to raise the discount rate. As you know, we measure inflation at the Dallas Fed by the trimmed mean. Our numbers show trimmed mean inflation running at 3.1 percent in July and a twelve-month rate of 2.7 percent and, not unimportantly, with 57 percent of the component elements increased at a rate of 3 percent or more. Now, of course, we cannot update those numbers until the next PCE number comes out, so you might argue that they are very stale. But the recent CPI release was not comforting. Dave, you mentioned 0.2 percent. Taking that at face value, you can say that consumer inflation is unchanged from July. But if you really look at those numbers, the rate for July was 0.19 percent, and the rate for August was 0.24 percent. If you annualize those numbers, that is a difference between 2.36 percent and 2.9 percent.

So we need to keep in mind that the August CPI reading is about midway between July's low reading and the elevated readings over the previous four months. At an annual rate of roughly 3 percent, it is better than earlier this year, but it is still uncomfortable. I take President Moskow's point about our credibility, particularly against the background of the trimmed mean, Cleveland's median rate of 3.4 percent, and then our six-month trimmed mean rate running at about 2.9 percent, I believe. I mention this simply to urge the Committee that—not only in our deeds, to take President Moskow's point, but also in our words—we need to continue engendering confidence about inflation expectations and be very careful in the way we state ourselves. We cannot take it for granted that inflation has been completely conquered. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. You mentioned a third-quarter estimate of about 3 percent?

MR. FISHER. That was the UPS estimate, yes, sir.

CHAIRMAN BERNANKE. I am just curious. The third quarter will be over in ten days. Given the data that we have already seen, what would you estimate is the range of standard deviation around the current running estimate? If you are looking at the third quarter, which is over shortly, we have seen at most two-thirds of the data we are going to see. What is the approximate range of error would you say in terms of estimating the current quarter?

MR. STOCKTON. It is still vague.

CHAIRMAN BERNANKE. Still pretty large. [Laughter]

MR. STOCKTON. I want to say something on the order of ¾ percentage point. Just the revisions in the data are not too different from that.

MR. FISHER. Mr. Chairman, if I may, again, this is just one source of data. They happen to be in a business that is, I think, particularly interesting. In preparation for the last meeting, they were talking about a number closer to 3 percent than the original estimate before the revision, and they proved to be quite accurate. But I want to make sure I was clear. The CFO was saying that their third quarter is running at a 3 percent growth rate—the same as the second quarter in their business—and their estimate for GDP growth in the fourth quarter is in the high twos or low threes.

CHAIRMAN BERNANKE. Okay. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. Since our last meeting, the data bearing on the near-term economic outlook suggest both slower economic growth and a bit less core price inflation going forward. In terms of economic activity, the recent news has been uniformly negative, resulting in a significant downward revision to growth in the Greenbook. Indeed, compared with the outlook of other forecasters, the Greenbook's projection of real GDP growth for the second half of this year is quite pessimistic; it would now rank in the lower 5 percent tail of the distribution of individual Blue Chip forecasters. I think this pessimism is not completely unfounded, however, largely because of my worries about the housing sector. The speed of the falloff in housing activity and the deceleration in house prices continue to surprise us. In the view of our contacts, the data lag reality, and it seems a good bet that things will get worse before they get better.

A major homebuilder who is on one of our boards tells us that home inventory has gone through the roof, so to speak. [Laughter] He literally said that. With the share of unsold homes topping 80 percent in some of the new subdivisions around Phoenix and Las Vegas, he has labeled these the new ghost towns of the West. In fact, he described the situation at a recent board meeting in Boise. He had toured some new subdivisions on the outskirts of Boise and discovered that the houses, most of which are unoccupied, are now being dressed up to look occupied—with curtains, things in the driveway, and so forth—so as not to discourage potential buyers. The general assessment is that this overhang of speculative inventory implies that permits and starts will continue to fall. Inventory ratios will rise, and the market probably will not recover until 2008. So far, builders remain hesitant to cut prices, fearing that doing so will cause a surge in cancellation rates on sold but unfinished homes. However, builders now routinely offer huge incentives, and price cuts appear inevitable. We have been following the Case Schiller house-price index, which is based on house-price data in ten large urban markets, three of which are in California. Beginning in May of this year, futures contracts on this price index also began trading; they suggest that house prices will be falling at an annual rate of about 6 percent by the end of this year. Of course, trading in this new futures market is still somewhat thin, but it is a signal that we need to keep a very close eye on the incoming data and watch whether the housing slowdown is turning into a slump.

Turning to inflation, core measures of consumer price inflation remain well above my comfort zone, but the latest readings on consumer prices have been modestly better. Unlike the Greenbook, I think the outlook for inflation has actually improved a bit since our last meeting largely because of the recent drop in commodity and crude oil prices. The relief on energy prices is, of course, very welcome, but we do have to be careful not to overestimate the extent to which past energy price pass-through has been boosting core inflation. For example, airfares might seem like an obvious case in which outsized consumer price increases reflect energy price pass-through. However, our staff recently calculated the share of jet fuel costs to total airline operating expenses and estimated that the jump in those costs likely accounted for less than half the rise in airfares this year. Instead, airfares may reflect strong demand and constrained capacity as indicated by very high airline passenger load factors. Still it seems likely that energy pass-through has played at least some role in the run-up of core inflation this year, so any energy price pressure on core inflation is likely to dissipate over time.

Now, as David noted, the Greenbook has completely offset the favorable effects on core inflation from lower energy prices by boosting the growth rate of labor costs. In contrast, I attach a little less weight to the recent data on compensation per hour. My guess is that most of the difference between hourly compensation and the ECI does relate to profit-linked items like bonuses and stock options, and that suggests to me that marginal costs of production are not rising significantly faster. Even if they are, it remains true that markups are high. So with sufficient competitive pressures, firms have room to absorb cost increases without fully passing them into prices.

Finally, I want to add my compliments to those of others to the Board's staff for a very interesting analysis of inflation dynamics and monetary policy. As I mentioned at our last meeting, it may be unduly pessimistic to assume that the recent rise in inflation will be highly persistent. Over the past ten years, estimated reduced-form models suggest that core inflation generally returns to its sample average after several quarters. Recently our staff examined persistence at a more disaggregated level and found that the same general pattern also holds for each of the major components of the core PCE price index, with price inflation for durables only slightly more persistent than price inflation for nondurables and services. In the current situation, this suite of regressive models indicates that core PCE inflation should fall to just below 2 percent by the middle of next year. I am not quite as optimistic as these simple models, but on balance my concerns about the inflation outlook have been slightly alleviated by recent developments.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. Thank you very much, Mr. Chairman. New England continues to grow modestly, though recent data suggest that some caution is warranted. District employment growth remains slower than that of the nation. Most states in the region are back to their January ’01 levels of employment; but the largest states, Massachusetts and Connecticut, are not. The Philadelphia Fed indexes of overall state activity, which are based largely on employment- and wage-related data, suggest sluggish growth as well, with Maine and Massachusetts at or near the bottom of the index for the country as a whole. Even with slow labor growth, certain categories of positions are very hard to fill—in particular, finance, accounting, certain IT specialties, engineers, biotech, and skilled labor for manufacturing. In fact, one large aircraft manufacturer was quoted as saying that the labor situation as far as he was concerned was insane. Costs for acquiring certain kinds of labor are rising, but in general, we are not seeing increases across the board in overall expected labor costs. But given the kinds of labor that are very much an important part of the businesses in the First District, such increases may not be far off.

Housing markets are clearly contracting. We are part of the coastal situation. Through the second quarter, New England house prices escalated at only half the pace of the United States as a whole, and home foreclosures, while still fairly low, ticked up more significantly in the region than elsewhere. Permits have fallen sharply, down 25 percent from last year and 22 percent from the year before, though yesterday’s starts data were a bit better for the Northeast than elsewhere. Slower building is leading suppliers of housing products to project declining business later this year as their sales tend to lag a decline in residential real estate markets. Consumer confidence for the region as a whole dropped off at a faster pace than elsewhere in the nation in August compared with the year before.

So there are all those reasons for caution about the growth rate of the New England economy, but not all the data are bad. Consumer prices, in general, are escalating more slowly, even though energy costs are higher. Downtown and suburban office vacancy rates are down, and rents are rising. Hardware and software businesses that were contacted or that are represented on our small-business advisory group report fairly strong revenues and definite concerns about costs. Business confidence measures and surveys were positive both for Massachusetts and Connecticut, reflecting profitable trends and stronger sales and even some strength in manufacturing. As I mentioned at our last meeting, the growth in personal income in the region, despite slow job growth, is on a par with that of the nation. Reflecting this and strong corporate profits, state income, sales, and corporate tax revenues are up, in some cases by relatively large percentages. So even though we have some reasons to be concerned about New England, not everything is negative—though that is sort of hard to find in the local media and you certainly will not hear the politicians talking about it either.

Turning to the nation, I would agree that most incoming data since our last meeting have been on the subdued side. Auto sales, trade data, and certainly anything to do with residential real estate markets have been more subdued than was expected. Of course, price measures have been subdued as well, at both the headline and the core levels. But like New England, not everything is slow. I would look at employment growth as fairly solid, even though it has slowed from the beginning of the year. The surprise in wage and salary income may reflect largely the exercise of stock options, but it could also reflect some pressure on overall wage costs because hiring certain kinds of workers is getting difficult. Oil prices are down, and gasoline price declines act as a kind of bonus to the consumer. Consumer spending isn't too bad. The latest retail sales data aren't bad at all; and although confidence bounces around a bit, it seems to have recovered—at least as much as gasoline prices have recovered. Industrial production seems pretty good, with strong growth in some equipment categories. Business profits are good. Orders and shipment data suggest that business spending is solid.

I am sort of repeating everything you said, David, and I probably should not do that. But I seem to be at the same point as people you mentioned in your presentation might be—a little shocked by the slowness of expected GDP over the next couple of quarters. In fact, when we in Boston look at our baseline forecast, it is a good deal more optimistic largely because we are not seeing as much of a decline in residential investment. I found the briefing yesterday to the Board interesting, when you tracked your own forecast of residential investment. At one time we were lower than you were, but you far surpassed us. In fact, with your decline 50 percent greater than ours in '06 and quite a bit larger again in '07, we get a GDP that is 0.3 percentage point higher in '06 and almost 1 percentage point higher in '07. We also see a lower NAIRU, and we have a bit higher estimate of potential—so it does not affect the gap as much, but it does affect the headline number of GDP. I understand all the mechanics, but the staff forecast is lower than most private forecasts. I wonder, if growth is that low for that long, whether it might set off a chain reaction of actually higher saving rates than you project and lower confidence that could feed back more strongly than you have anticipated. In that regard, I found the recent estimates of a rising probability of recession interesting. I do not think we're going to have a recession, but I do wonder about it if, in fact, we do realize the slow growth of the Greenbook forecast.

However, how much do we really know about how long residential investment will stay negative without a recession? Mortgage rates are not up that much—only 50 basis points or so from the beginning of the year. Incomes are rising, and nonhousing wealth is rising. At some point, buyers should recognize that housing has gotten more affordable and resume desired purchases, perhaps without further major price declines. Certainly speculative building is off, and investors have backed out of contracts, but how much more of that really will occur? The Greenbook would suggest another year and a half, but shouldn't builders be acting quickly now to reduce the amount of overbuilding and to preserve price levels? Underlying demographics and other fundamentals have not changed either. So it is hard actually for me to see that residential investment will be that hard hit that long. I take Janet's comments about the builders in her District. I imagine that, if I had talked directly to builders in the First District, they might have been pretty gloomy, too—again, given some reflection of the coastal situation. I did talk to Nick Retsinas at the Joint Center for Housing Studies, which Harvard runs, and he was not particularly negative. He felt that a correction is occurring but thought that it would be short-lived. Now, he did say that they were going to come out with some revisions and that he was still working on them, so his outlook may get more negative. But I am going to try to keep tabs on where they see things because they do stay in touch with all the large builders across the country. Again, the knock-on effects of lower residential construction may not be all that great. You mentioned that nonresidential construction is up, but the Greenbook says that it will slow soon. A good deal of that is oil related; and as long as people are working, incomes are solid, and financial conditions remain pretty accommodative, consumption ought to remain solid.

So I wonder whether the Greenbook baseline is really more of a worst-case scenario for residential construction and GDP, though I realize regional effects of the housing slowdown on employment and spending could be considerable. If growth is faster and if your estimates of the NAIRU and the participation rate are more or less on target, I also wonder about the risks of higher inflation over the forecast period than is the case in the baseline as resource pressures grow. Moderating energy costs are helping here, but they have been volatile in both directions, and I at least would like to see a somewhat longer period below recent highs before declaring victory. In sum, the rather benign baseline forecast may be the best; but as you noted, there are great ranges of uncertainty. There are downside risks to be sure, and it is impossible to rule out a recession given the slow growth forecast of the Greenbook. But I really think the risks to be concerned about lie in the area of stronger growth, more pressure on resources, and higher and more persistent inflation.

As many other people have commented, I, too, found the material on inflation persistence of some interest and very well done, though I take the point that it is hard to be confident either about the definition of persistence or about whether it is, in fact, lower or higher. I would argue here that it might be better to assume, as we consider the stance of policy, more rather than less persistence, in part because we are uncertain and in part because the costs of being wrong are somewhat asymmetric. If inflation is less persistent and we assume it is not and take a conservative policy stance, inflation should retreat quickly and help shore up our credibility. Choosing a weaker stance and being wrong about it could be quite costly. Given the uncertainties facing us, the nature of the incoming data, and the fact that we have already paused, it might not be time right now to take out more inflation insurance, but I certainly think it is time to be very vigilant. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. The Fifth District’s economy has grown at a somewhat faster pace in recent weeks, reflecting a solid uptick in manufacturing. Preliminary results from our September survey are showing increases in all manufacturing measures, with a particularly strong performance of shipments and new orders. The six-months-ahead outlook measures are also coming in broadly stronger. Growth in the District services sector continues at a moderate pace. Retail sales remain somewhat sluggish, however, held down by soft big-ticket sales, which we understand were mainly in auto and building materials. The residential real estate market shows signs of further cooling, especially in Maryland and Northern Virginia. As has been the case for several months, however, real estate activity varies widely across the District, with the Carolinas, which were less affected by the boom, reporting continued strength.

Labor market conditions remain taut, with job growth generally reported to be solid. Complaints that skilled workers are hard to find continue to be heard, and survey evidence suggests continued wage pressures. Recent reports regarding District price pressures generally tilt toward the firm side on balance. Early reports for September for the manufacturing sector show a notable acceleration in both current prices paid and current prices received and large increases in six-months-ahead expectations for both. Reports on service-sector prices are more mixed. Our respondents from the retail sector report moderation in current price trends but see more-rapid six-months-ahead price gains than they did last month. Our other service-sector firms report no change in current price trends but expect some moderation in coming months.

Regarding the national economy, since our last meeting we have received largely positive news pertaining to the outlook for consumer spending. There was a sizable upward revision to the current level of labor income, which improves the outlook for real disposable income growth. Lower energy prices should provide an additional, though one-time, boost to consumer spending. So on net I find myself, again, a bit more optimistic than the Greenbook on consumption.

The housing data certainly have been weaker than anticipated, and I now expect a somewhat steeper decline, as does the Greenbook. Forecasting this housing adjustment is particularly difficult because, as President Minehan pointed out, we have only one or two episodes for comparison in the post-Reg Q regime, and as David Wilcox pointed out, they don't seem to closely resemble our current situation. I find this Greenbook's more pessimistic outlook for housing itself plausible, but I'm still fairly skeptical of large indirect spillover effects on employment or consumption. For overall activity, I expect real GDP growth to be somewhat below trend, especially this quarter, but above the Greenbook through the end of next year.

My views on the inflation situation have not changed much since our last meeting. The lower reading on July's core PCE was encouraging, and the easing of energy prices is clearly providing some relief on headline inflation. However, July's lower numbers were not particularly broad based, and the August CPI report shows a significant rebound in core inflation, as President Fisher noted. While labor compensation numbers have been hard to interpret, they also appear to point in the direction of greater price pressures, which I take it to be the staff's view. The downward movement in TIPS inflation compensation since the last meeting has been quite striking—more than 30 basis points at the five-year horizon. I've made a lot of comments on TIPS inflation compensation spreads in past meetings, and it's not clear that this downward movement signals much of an improvement in the outlook for core inflation in the near term. I pointed out earlier that the Bluebook shows that the fall in near-term inflation compensation has occurred mainly at a three-month or four-month horizon. Compensation for the period running from October/November this year to the same period next year has hardly fallen at all, and this to me suggests no significant change in the rate at which the public expects core inflation to moderate over the next year or two. Moreover, one-year-forward expected inflation rates five and ten years out have not fallen much, so I do not view the recent fall in TIPS inflation compensation as terribly comforting. Overall, regarding inflation, I'm quite apprehensive about waiting for core inflation to decline as slowly as it does in the Greenbook or about letting a new reduced-form model do our work for us.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Chairman Bernanke. Overall, economic activity continues to expand in the Third District. The consensus in the regional business community is for moderate growth in the months ahead, but some sentiment has turned more cautious in the intermeeting period.

We have seen a slowdown in regional manufacturing activity over the past month. Our business outlook survey, which remains confidential until noon tomorrow, weakened somewhat in September with general activity falling just barely into the negative area, at -0.4, from an 18.5 number in August. This is the first negative reading we've seen since April 2003. The diffusion indexes for shipments, new orders, and unfilled orders also turned slightly negative. I don't want to read too much into one survey. The April 2003 dip was very short-lived, and we saw a similar pattern in our survey in the mid-1990s, when growth slowed but then picked back up again fairly quickly.

Part of the slowdown in manufacturing is at firms that supply the housing industry, reflecting a slowdown in residential real estate, which has become more pronounced in our District since our last meeting. Building permits and home sales were down in July and August. Inventories of homes on the markets, like much of the nation, continue to increase. House-price appreciation has slowed, but we have not yet seen outright declines. Despite an increase in cancelled sales of new homes, builders generally indicate that their backlogs will keep them relatively busy through the rest of the year. However, some real estate contractors have begun to lay off employees in anticipation of slower activity.

A pickup in activity in nonresidential real estate markets has been helping to offset the decline in residential construction. Office vacancy rates continue to edge down, and net absorption of office space continues to be positive. However, over the next year, some moderation in nonresidential building construction in our three states is expected. In response to a special question in our manufacturing survey this month, about one-third of the firms report that they plan to lower their expenditures on new structures next year compared with this year. Only one-tenth of our firms expect to raise spending on structures. When we asked a similar question a year ago, about half the firms expected to raise their expenditures on structures in 2006, and, in fact, we did see that this year. For other categories of capital spending, however, firms by a large margin anticipate expenditures in ’07 to be the same as or higher than those in ’06. At some small banks in our District there has been a recent pickup in nonperforming loans, which is concentrated in their commercial real estate portfolios.

Conditions in other sectors of our region are little changed since our last meeting. Retail sales of general merchandise edged up, but sales of back-to-school merchandise, especially fall apparel, did not seem to meet manufacturers’ expectations. Payroll employment continues to expand in our three states at a somewhat slower pace than in the nation as a whole, which is typical of the region. The unemployment rate, which had edged down slightly in June, edged back up in July but remains below 5 percent. While many employers continue to report difficulties in filling positions, the Philadelphia staff’s forecast is for employment in our region to grow at a pace of about 1 percent over the next year, slightly lower than this year. Unemployment rates in the region are expected to increase modestly maybe over the next year.

Growth continues at a moderate pace, but we see little indication of receding price pressures in the District. The index of prices received in our manufacturing survey edged up in

September. There was some minor moderation in prices paid, but that index remains at an extremely high level. Employers in a number of industries in the region report that wage and salary levels have been moving up at a somewhat faster pace than they did a year ago.

Turning to the national economy, my view is not much different than it was at our last meeting. My main concern remains the outlook for inflation and the risk it poses for our credibility. In my view, the Fed's most important contribution to a healthy economy is achieving and maintaining price stability. As expected, incoming data continue to indicate a moderation in growth to potential or somewhat below potential. On the negative side, housing has weakened more sharply than many expected, and auto production seems to be turning down for the rest of the year. On the positive side, as has already been mentioned by a number of others, business investment and corporate profits remain firm. Employment continues to rise at a moderate pace. The revised wage and salary data are now more consistent with the strength in consumer spending that we've seen, and continued growth in income and perhaps lower gas prices will help offset the possible negative effect that we may see from a deceleration in housing prices. On balance, I am somewhat more optimistic than the Greenbook about the growth side of the economy. I, too, see growth somewhat below potential over the next four quarters, but that's driven predominantly by a slowdown in the near term—that is, in 2006. Then I see a return to potential more or less in 2007, although my estimate of potential is probably slightly higher than the Greenbook's estimate.

Now, given the level of precision of our output measurements and forecast of potential GDP growth, I'm really not overly concerned about the forecast at this point. The adjustment in the housing sector to more-sustainable levels is forecast to occur without triggering a recession and without triggering much of an increase in unemployment. I believe we should not attempt to stand in the way of that happening. It's a mistake to think that the forecasted moderation in growth will bring inflation back to a level consistent with price stability. Indeed, the Greenbook's baseline forecast of core PCE inflation remains above 2 percent through the end of 2008. Even in the alternative Greenbook simulation of a slump in housing, in which aggregate demand weakens and real GDP growth slows to just 0.6 percent in 2006 and barely above 1 percent in the first half of 2007, core inflation hardly changes and remains above 2 percent in 2008. Thus, it seems to me that language from us in the press that indicates that moderating growth will help to restrain inflation is not really consistent with our forecast. I think it imputes a degree of precision to an estimated Phillips curve that we just don't have.

Over the intermeeting period, we have had some hopeful news on the inflation front. Core CPI inflation has not accelerated further in the past two months, and oil prices seem to be down. Thus, headline inflation, as I pointed out, is likely to be way down in September, and we will seem quite omniscient. The measure of expected inflation over the ten-year period in our Survey of Professional Forecasters has not changed—it remains at 2½ percent. The August rise in the Michigan survey of one-year-ahead inflation expectations seems to have been reversed in the preliminary September numbers, largely because of the decline in oil prices. However, both compensation per hour and unit labor costs have been trending up, not down as the earlier data suggested, although I will note that the usefulness of the compensation numbers in predicting inflation is quite weak. Although core inflation has stabilized, its level is still above our so-called comfort zone.

To my mind, the inflation outlook is quite uncertain. We do not yet know if the positive developments in oil prices will stick or not. I hope they will, but certainly we've seen energy prices retreat only to move back up again, and the hurricane season isn't over yet. Thus, we should not become too sanguine about inflation from one or two data points. Moreover, we do not know if the upward revision to labor compensation will pass through to core inflation, as built into the Greenbook baseline, or if measures of medium-term inflation expectations will continue to decrease. What we do know is that core inflation has been above 2 percent for two and a half years and is expected to be there, according to the forecast, for another two years. Put another way, there is little evidence in the forecast that policy actions to date will bring core inflation back below 2 percent before sometime in 2009. I think that should concern us.

I see two inflation scenarios as being plausible, and I struggle with which one I believe to be the correct one. In the first scenario, core inflation is elevated primarily because of transitory factors, like the pass-through of higher oil prices, and reflects an adjustment to these changes in relative prices. As oil prices stabilize, assuming that they do, we'd expect to see core inflation presumably fall and fall faster than indicated in the baseline Greenbook forecast. The Greenbook forecast appears to me to incorporate an assumption of relative price stickiness that is inconsistent with some recent studies on microdata. Thus, in this scenario, I see inflation falling, perhaps more in line with the Greenbook's alternative scenario of less persistent inflation. This story is appealing and plausible to me, but it rests on the transitory nature of the current measures of inflation. Even in this most desirable of scenarios—seeing inflation fall back to 2 percent or slightly less in 2007—we have to recognize that we will have essentially ratified a higher price level driven by oil price increases, and we should ask ourselves whether or not we are comfortable with that.

In the other scenario, stimulative monetary policy during the past five years has been a major contributor to the rise in core inflation. In this case, we wouldn't expect to see a deceleration of core inflation until monetary policy has firmed enough to take out the cumulative effects of that accommodation. The Committee has now moved rates up considerably from historical levels. If potential growth is now lower, as the staff indicates, the equilibrium real rate may be slightly lower, suggesting that monetary policy may be slightly firmer now than previously thought. Even so, it has only recently reached that level. But given the imprecision with which we estimate potential output or equilibrium real rates, I really don't take much comfort from such measurements. Thus, to my mind, there is a significant risk that policy is not yet firm enough to achieve the desired outcome.

Regardless of which of these two scenarios you think more likely, I think we must be concerned that our credibility and the consequences of allowing inflation to remain above our comfort zone for so long are at question. If scenario 1 comes to pass and inflation falls faster than suggested by the Greenbook baseline, then we would all breathe easier. But that scenario seems largely a bet on oil prices and on the presumption that past accommodative policy is not playing any role, and that makes me nervous. I would much prefer to believe that scenario 1 is the operational one. However, again, I find it hard to believe that a four-year to five-year period is transitory, so I have to consider the alternative. If the first scenario is wrong and inflation evolves as in scenario 2, then our credibility is seriously at risk if we fail to take further steps to curtail price increases. We might be lucky. But we might risk finding ourselves in a situation in which inflation expectations become unhinged, making it more costly to bring inflation back down. As has been mentioned, in the Greenbook alternative forecast in which inflation expectations become unanchored, inflation remains near 3 percent with only a slight decline in 2008, and growth slows below 1¾ percent next year and remains well below trend through the forecast period. To me, 3 percent inflation and 1½ percent real growth is not a comfortable place to be and would make restraining inflation in the future even harder for us.

I'd like to conclude my remarks by thanking the Board staff for their research on inflation dynamics and the possible reduction in the level of persistence in recent years. I think this is an important area for research, but I encourage the staff to continue its work to try to identify structural models of these dynamics in addition to reduced-form models. I agree with the staff that the monetary policy implications of the reduced-form findings presented in the memo depend on how one chooses to interpret them. The results presented by the staff and others suggest that, since 1990, inflation has become less persistent and appears to be less related to other macro variables as well. We do not know whether these changes are due to a more aggressive stance of monetary policy against inflation and to our credibility or to fundamental changes in the domestic or world economy. If we suppose that lower inflation persistence is due to enhanced policy credibility, then it is incumbent upon this Committee to maintain that credibility. That is, we should not expect inflation persistence to remain low if the Fed acts in a manner that is inconsistent with its commitment to price stability or risks its credibility by neglecting to take actions that return the economy to price stability in a reasonable period of time. We shouldn't ignore the fact that the longer we allow deviations from price stability to persist, the higher is the risk to our credibility and the higher is the risk that recent high inflation readings will raise longer-term expectations, thereby putting us in a very awkward position a year from now. Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Mr. Chairman, I'd characterize the Tenth District's economy as quite healthy right now. As you know, the Tenth District has benefited perhaps disproportionately from the rise in energy prices over the past few years, and this is providing considerable stimulus to the local and state economies in the District. We are also seeing strong manufacturing activity driven by exports of District products. Although the housing markets across the District can be characterized as soft, we have no reports of serious declines in prices anywhere in the region. Retail sales, excluding autos, also are holding up pretty well for us. The other soft spot for us is agriculture, and that is tied pretty much to the drought that we continue to experience.

Regarding the national economy, the economic information received since the last meeting confirms a further slowing of economic activity this quarter. Moreover, weakness in housing and auto production suggests that the fourth quarter could be a little bit weaker as well. At the same time, we have recently experienced the sizable and largely unexpected declines in energy prices that we have talked about here, which, if maintained, could provide some stimulus over the balance of the year to offset some of that weaker information. Currently, I expect growth to slow to a range of 2 percent to 2½ percent in the second half of the year and to rebound to above 2½ percent or to 3 percent next year. Generally speaking, I am more optimistic than the Greenbook, especially with regard to housing and consumer spending, and I'm not nearly as pessimistic as the Greenbook on potential output.

As to housing, we are in fact, as all have noted, squeezing out of that sector the speculative excesses that developed with the low interest rates of recent years—and doing so is unavoidable if we want to correct the sector. The adjustment process has obviously been painful for some, and it has not yet run its course. However, we perhaps see ourselves getting a little closer to the bottom than we might think right now, and that's related to the fact that credit remains available at reasonable rates for most homebuyers, as suggested by the recent information on mortgage applications. So, yes, it is painful, and yes, we are going through it; but I don't think it is necessarily long lasting in terms of the consumer's position.

For the consumer more generally, the situation is obviously mixed. On the one hand, consumption will likely receive less stimulus going forward from the withdrawal of home equity, and with slower house-price appreciation, wealth effects will likely be lower as well. On the other hand, higher labor compensation and lower energy bills should provide support to the consumer in terms of confidence and the ability to spend. Overall, I continue to believe that there are somewhat more downside risks than upside risks to the outlook over the next quarters, but I think we are moving in a fairly consistent way as far as GDP growth goes.

Finally, let me provide my perspective on the inflation outlook. My overall views on inflation have not changed materially since the last meeting. I continue to expect core PCE inflation to moderate from about 2.3 percent this year to 2.1 percent next year on the course we have right now. The big negative on inflation, of course, is the higher trajectory for labor costs, which has been mentioned. Although the recent revisions to compensation are perhaps somewhat unsettling, such concerns are partly offset by the recent more-favorable monthly inflation numbers and by the significant fall in the prices of oil, gasoline, and natural gas in recent weeks. Although the recent inflation data have not caused me to alter my inflation outlook, I am in one sense more confident in the forecast of moderation than I was a month ago or so. On balance, as we look at all this, I agree that we still have some upside risks to inflation that we have to remain aware of as we look to the policy discussion ahead. Thank you.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. Since our last meeting, I made a special effort to talk with my directors and business contacts about two topics—developments in housing markets and inflation. My District has been growing at a slower pace than most other parts of the country; consequently, housing prices in the District never appreciated as much as those in the hot markets in the country. Nonetheless, a major Realtor in our region told me that houses in his market, which includes the northern half of Ohio and the western half of Pennsylvania, are taking longer to sell and that the average price of houses sold from January to August is down about 2 percent compared with the same period last year. His view is that nationally the housing market still has a way to go before conditions stabilize. Nevertheless, right now he sees only a limited possibility that the adjustment process will cause serious harm to the U.S. economy.

Apparently people are not leaving much to chance. I heard a report yesterday morning that sales at religious stores for statues of St. Joseph have been soaring. [Laughter] It seems as though people who are trying to sell their homes are buying statues of St. Joseph because he's the patron saint of real estate, and they're burying him next to the "For Sale" sign. Unfortunately, there is no patron saint for central bankers. [Laughter]

Some forecasters, like the Greenbook, are expecting strength in the commercial construction sector to offset much of the weakness in residential building. One of my directors, who represents a large national commercial construction firm, has indicated that commercial building in the past few years has been boosted by the growth of health and education sectors. His entire book of business increased 10 percent in real terms this year compared with last, and he is looking to next year to have the book of business increase 3 to 4 percent. However, he is expecting it to be flat in 2008, and his story squares with what I am hearing from bankers as well—namely, that the flow of commercial loans in the pipeline, although not rapidly falling off, is slowing, and it hasn't been building as it was. The Greenbook baseline captures very well the pattern that I've been describing in its projection for nonresidential investment over the next few years.

Now, turning to inflation, the two CPI reports that we received during this intermeeting period have not provided me with enough evidence that inflationary pressures have meaningfully diminished. The reports, however, have encouraged me to think that the forward momentum has been broken, but I'd like to see the next few CPI numbers be at least as good as those for July and August, if not better, to be convinced that that momentum has been broken. I've heard some hopeful comments regarding inflation in the past few weeks from several of my directors. Just a few months ago they were indicating that elevated energy prices and material prices had provided them with an opportunity to get more-generalized price increases, and they had wondered whether that was going to be a one-time catch-up opportunity or whether it would be persistent. Now it appears to have been a one-time opportunity, which is passing or has passed.

Several of my directors reported last week that they have resorted to unbundling their prices to cope with the rising prices of energy and material costs. On their invoices, they are breaking out the price increases that are due to the increased cost of steel, copper, energy, and shipping in order to pass them on. Apparently, their customers are willing to accept price increases that are due to those increased energy and material costs. But the expectation on the part of both buyers and sellers is that, as energy and material costs dissipate, the ability to pass on price increases will be removed. Several of my directors said that they are not planning any price increases for the next year and that they suspect their commodity costs will be lower than they were this year as well.

As others have mentioned, there has been some interest in the elevated unit labor costs in the second-quarter productivity and cost reports. As Dave noted, the compensation growth underlying unit labor costs was boosted when the BLS took on board the first-quarter unemployment insurance tax records. There is some suspicion that the dramatic increase in compensation had a lot to do with stock options and incentive pay, but the underlying data are not available yet, so we don't know for sure. My staff was able to get some summary figures for Ohio. Compensation has been growing steadily in Ohio over the past several years, but the preliminary figures are flat for the first quarter of 2006. However, there was double-digit growth in three sectors—management of companies, finance and insurance, and utilities. These sectors are often the ones that show substantial growth in the first quarters because they pay out stock options and that's often when those stock options are realized. So at least in my District there is no evidence of any broad-based acceleration in compensation, and I tend to agree with the staff's view that it's too early to incorporate those higher unit labor costs into the inflation outlook.

At our last meeting, I expressed the opinion that whatever weakness we would see in GDP was more likely to reflect demand factors than supply factors, and therefore I saw risks to both our objectives. The current Greenbook baseline projection for GDP is even lower than it was at the time of our last meeting because of revisions, as Dave mentioned, to both supply and demand factors. I still think that, if the Greenbook projection comes true, softer demand is likely to be the more dominant explanation. Nevertheless, I would like to see further evidence that inflationary pressures have been checked, if not actually reversed, before I would conclude that the risks to our objectives are evenly balanced. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you, President Pianalto, for the new leading indicator of religious statues. [Laughter] I recently gave a speech in South Carolina, where they always have an invocation, and the pastor called for God's blessing on monetary and credit policy. [Laughter] President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Since this is my last meeting, I want to say formally what an honor it has been to serve under your leadership, at least for a short while, and under Chairman Greenspan's leadership before that. And to my colleagues around the table and around the room, I want to say what an extraordinary experience it has been to work with you not only on policymaking but also on the other System business for so many years. There is a lot that I will miss, and your friendship is at the top of the list.

I will be mercifully short with my comments this morning. At our last meeting, I indicated that the data from around our District had finally begun to reflect the anecdotal reports of slowing that we've been getting for some months. The most recent data underscore that trend, but with some crosscurrents that suggest that some sectors continue to be reasonably solid.

With a total of forty-four directors in the six offices in our Atlanta District, we have an unusually large complement of regular month-to-month contacts who can often signal a significant shift in sentiment about what may lie ahead. Sometime ago we began to ask our directors each month to give us not only their views on specific economic issues but also their overall sense of the economic outlook. Very simply, we asked them to indicate whether they think six months out that growth will be stronger, about the same, or weaker. Over the past six months we have watched the aggregation of those views deteriorate to the point that, in our tabulation last week, the only directors who expected things six months out to be better were from New Orleans, where economic conditions can only get better.

Some of the uneasiness about the outlook in our region clearly reflects the sharp housing adjustment that we've seen, particularly in our once-hot coastal markets. That painful adjustment continues, with folks in the industry saying that they think the bottom may be as much as a year away. I talked just yesterday afternoon, before I left to come to Washington, with the CEO of one of the large national homebuilders headquartered in Atlanta. Mr. Chairman, I think he was in the group that came to see you and others just a few weeks ago. He emphasized that the adjustment that's going on is broader and more significant than the data suggest. He said that sales cancellation rates, even in cities like Atlanta, now exceed 50 percent, whereas they had been running about 30 percent. He underscored something that we have talked about before, and it has been mentioned again this morning, that the fall in the real selling price is often masked by incentives and give-backs that have become very widespread. He said the only exception to the adjustment in housing that he could see was in the major Texas markets.

The stories out of New Orleans continue to be depressing, with business leaders now saying it may be a decade, rather than a few years, before the housing crisis there can be substantially resolved. There are simply not enough habitable housing units to accommodate the workers, especially low-skilled hospitality industry workers who are needed by businesses that are trying desperately to reopen and to get back on their feet. As a consequence, more and more jobs are being moved out to other cities, and many of them are not expected to return.

As I mentioned at the outset, there are also more-encouraging crosscurrents in our region. Manufacturing activity still looks reasonably solid; transportation and tourism do as well. We had some good employment gains in all our states last month, after some disappointing data the month before. We continue to get reports of shortages of skilled labor in a number of trades, including the construction industry. Despite continuing input price pressures, which others have talked about, we're told that the ability to pass along those costs in final goods and services is still very limited for many businesses.

As far as the national economy is concerned, it's my view that we're about where we expected to be at this point, with no huge surprises since our last meeting. Evidence of slowing is now more apparent, but many crosscurrents also exist at the national level. Corporate profits are high, investment spending still seems to be reasonably strong, and consumer spending remains supportive of growth. While many sectors continue to perform reasonably well, as my regional remarks suggest, considerable uncertainty does exist about housing, both in terms of how steep the slowdown will be and what the slowdown might mean for consumer spending.

Although energy prices have clearly fallen back, inflation, as everyone has said, remains above our preferred range. We've had some encouraging monthly inflation data since our last meeting, but the hoped-for moderation in prices that we expected to see is still mostly a forecast. Still, I take some encouragement from the fact that the forecast for lower inflation readings over the period ahead is not only reflected in the Greenbook but also in the modeling work my own staff has done and in the projections of outside forecasters. Additionally, modest inflation expectations seem to be holding. And markets are not expecting us to deviate from our current policy stance, at least for the short run.

Finally, Mr. Chairman, I want to say to you and others that I'm counting on all of you to protect the buying power of my hard-earned retirement savings. [Laughter] I'm going to have lots more time as a retiree to be a Fed watcher and a letter writer, and I promise to be in touch if you don't do a good job. [Laughter] Thank you very much.

CHAIRMAN BERNANKE. Thank you very much, Jack. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me make just two or three fairly general comments. First of all, I, too, want to compliment the staff for the paper on inflation dynamics. I think it was very well done. It is important, and we need to take it seriously, and I view it in some sense as a follow-up to some of the work that has been going on at some of the Reserve Banks in recent years. One of the things that I think is important about it is that, at a minimum, it ought to raise a yellow flag about our ability empirically to go from measures like output gaps, or the NAIRU, or other measures of capacity to the determination of inflation. I don't want to exaggerate that point. I know there are different ways of interpreting it, and I know the work isn't definitive. But I do, nevertheless, think that we need to think about it seriously and consider it when we discuss the inflation outlook and its relation to economic performance.

Second, with regard to the economic outlook, I indicated at the last meeting that I was somewhat more optimistic than the Greenbook, and that gap has opened up even further. I am more optimistic, although I'm not talking about the current quarter. One way of summarizing my position is that I think the positive effects of higher incomes, lower energy prices, higher equity values, and stable-to-declining interest rates are greater than you apparently do. I say that even though I can readily imagine that the decline in housing activity turns out to be both more protracted and deeper than you forecast it to be.

By the way, as a footnote, if I did the numbers right, back in 1965 and 1966, we did get a decline in aggregate housing starts of better than 20 percent without a recession, although 1966 was considered a mini-recession, or a pause, or something—I've forgotten what the exact term was.

MR. KOHN. Growth recession.

MR. STERN. Yes, something like growth recession. But the bottom line here is that it hasn't been a good idea to underestimate or underrate the performance of the U.S. economy since late 1982.

Finally, with regard to inflation, even if I'm right about the economic outlook and we get more growth, I don't think that necessarily implies that we'll have more inflation than is predicted in the Greenbook. Having said that, I still think that core inflation at its current rate is of concern, as is the outlook that you portray. Thanks.

CHAIRMAN BERNANKE. Well, it’s 11:00. Why don’t we take fifteen minutes for coffee. Thank you.

[Coffee break]

CHAIRMAN BERNANKE. I think we can reconvene. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you. Let me just start with the broad contours of our outlook. Growth has obviously slowed. The second half is likely to be relatively weak, but the only place we see pronounced weakness is in housing, and we expect a return to moderate growth going forward. Core inflation seems to be easing a bit, and it may have peaked in the second quarter, if you look just at the three-month annualized numbers. But inflation remains uncomfortably high, and our forecast assumes only a very gradual moderation over the next two years. In terms of numbers, we expect the real economy to grow at around its 3 percent potential rate in ’07 and ’08. We expect core PCE inflation on a Q4/Q4 basis to come in just below 2½ percent in ’06 and to moderate to about 2 percent in ’07 and 1.8 percent in ’08. Our outlook is largely unchanged from August. It’s conditioned on a path for policy that is flat at current levels for two to three quarters. This puts us slightly above the level that is currently priced into the risk-adjusted Eurodollar futures curve.

In terms of uncertainty and risk, we see somewhat greater downside risks to demand growth than we saw in August, but the inflation risks still seem likely to be to the upside. Weighing the balance among these competing risks, we believe, as we did in August, that inflation risks should remain the predominant concern of the Committee, not so much, to borrow the Chairman’s formulation, because the probability of a higher inflation outcome is substantially greater than that of a much weaker growth outcome but because the costs of an erosion in inflation performance would be more damaging.

On the growth outlook, we're seeing a somewhat greater adjustment in residential investment than we anticipated, but this has not yet induced or been accompanied by a significant weakness outside housing. Of course, the outlook for the economy as a whole should not be particularly sensitive to plausible estimates of the direct effects of the remaining adjustment, whatever it is, left in residential investment. What seems more important, of course, is the potential effect of what's happening in housing on consumer and business spending. We just don't see troubling signs yet of collateral damage, and we are not expecting much. The fundamentals supporting relatively strong productivity growth seem to be intact. The acceleration of the nominal compensation growth that appears to be under way, combined with the moderation of headline inflation that we expect as energy prices moderate, should produce fairly strong growth of household income, even with the moderation in employment growth to trend.

Corporate balance sheet profitability remains strong. Domestic demand growth outside the United States is expected to remain quite robust even though there has been some moderation in current measures of activity in some markets. Of course, the level of interest rates is not particularly high in nominal or real terms. Equity prices and credit spreads suggest a reasonable degree of confidence in the prospects for future expansion. Financial market participants report very strong continued demand for credit and for risk generally and very ample liquidity. This strength may reflect other factors that are operating on demand for financial assets, but still survey-based measures of confidence have not deteriorated dramatically. This, of course, may prove too optimistic on the growth outlook, and the risks seem weighted to the downside.

On the inflation front, recent data have not altered our forecast or, really, our assessment of the risks to that forecast. Although there are signs of moderation in underlying inflation, the core PCE and a range of alternative measures continue to grow at levels that are uncomfortably high. We expect further moderation to occur only gradually over the forecast period. The latest data have been somewhat reassuring, and inflation expectations at various horizons have behaved relatively well since our last meeting. The acceleration in compensation growth and unit labor costs does not justify a higher inflation forecast in our view, provided that expectations remain well anchored, business markups fall, the ongoing moderation in growth reduces pressure on resource utilization, the futures curve proves a reasonably accurate prediction for the path of energy prices, the dollar declines only modestly, and so forth. These are reasonably good arguments, but we still think the risks are to the upside. Over the past two years, we have consistently revised up our forecasts for inflation. I'm not sure we really yet understand the forces behind the unanticipated acceleration in underlying inflation. Medium-term inflation expectations, while not rising at stated levels, may be higher than is consistent with an inflation objective in the range the Committee has talked about in the past. Containing these upside risks should be the dominant focus of policy until we see a more-pronounced moderation in current and expected underlying inflation. As my comments imply, we don't have a lot of differences with the Greenbook on the contours of the outlook. The Greenbook shows slower growth relative to lower potential but also more inflation than we do. It also shows more slack with more inflation and a little less confidence in the strength of demand growth than we do for the reasons I hope I explained.

I see certain questions as key. On the growth front the question is, Will weakness cumulate? If we see a more-pronounced actual decline in housing prices, will that have greater damage on confidence and spending? But the more interesting questions are really on the inflation forecast, and let me just talk very briefly about two.

First, does the Greenbook forecast produce enough moderation in inflation soon enough to keep inflation expectations anchored? The baseline forecast has inflation falling to 1.5 percent, at least based on the last time we saw a long-term forecast, only over a very protracted period—a period that is significantly longer than the one many central bankers would consider an acceptable deviation from an inflation target. We have already seen a bit of troubling speculation from people who write about us. This Committee may have more inflation tolerance or a higher implicit target than its predecessor. Should we try to achieve a more rapid moderation of inflation? How should we evaluate the costs and benefits of trying to achieve a quicker and more substantial moderation of inflation, particularly given the tenuous state of the evidence on inertia and persistence? Is this gentle and gradual expected moderation in inflation optimal, given the softness of the outlook for demand? These are questions that are worthy of a more explicit discussion by the Committee, particularly if we're going to talk about moving toward a quantitative definition of price stability with more disclosure around the forecast.

The second and related question is about inflation in our forecast: With the stance of monetary policy that is now priced into the markets—this is a softer path than the one in August—how confident can we be that we are likely to achieve the forecast of sustained growth and gradually moderating core inflation? I think we can be less confident than the confidence you might read into current market expectations and the uncertainty that surrounds them. Of course, the behavior of long-term inflation expectations in financial markets suggests that this risk is not particularly high at present and that we can take some more time to get a better handle on the evolution of the economy before deciding what is next in terms of monetary policy actions. But I think that we may have more to do, and we should try to avoid fostering too much confidence in the markets that we’re done. We need to preserve the flexibility to do more if that proves necessary to keep inflation expectations anchored. Thank you.

CHAIRMAN BERNANKE. Thank you. Vice Chairman … Governor Kohn. [Laughter]

MR. KOHN. Thank you, Mr. Chairman. Whatever you want to call me is fine. [Laughter] I’m just glad to be here. [Laughter] I don’t think I can follow that up.

Given the initial conditions—the doubling and more of energy prices over the past two years, the overexuberant housing market coming to grips with a renormalization of interest rates, a very low personal saving rate, and an uncomfortable increase in inflation this spring—a period of modestly below-trend growth and gradually ebbing inflation, as in the Greenbook forecast, is about as good an outcome as we can expect, as Dave Stockton noted. In that regard, several developments over the intermeeting period have made me a bit more comfortable with the plausibility of such an outlook.

The weakness in housing has deepened and is more definitively leading to growth of output below potential. In fact, in my view the behavior of the housing market constitutes the main downside risk to sustained moderate economic growth. We’re in the middle of a housing adjustment, which has been hard to forecast, especially because it involves the unwinding of an unknown amount of speculative demand. With inventories rising and reports of price cuts getting greater prominence, the market isn’t yet showing signs of clearing and stabilizing. In the Greenbook forecast, residential investment, though weak, is supported by continued growth of income and relatively low mortgage rates, while house prices basically level out in nominal terms. As the Greenbook notes, however, this forecast leaves some aspects of the existing disequilibrium intact, most notably the high level of prices relative to rents. Also, the cutback in construction doesn’t completely offset the apparent excess building of the boom period. As a consequence, I see the housing forecast in the Greenbook as very far from the worst-case scenario that President Minehan characterized it as. And, we are just beginning to see the effect of the downshift in house-price inflation on consumption starting to play out.

Outside of housing, however, recent developments should help to sustain continued economic expansion. Financial conditions remain quite supportive of both business and household spending. Long-term interest rates have fallen appreciably since midyear, and they are low in both real and nominal terms. Risk spreads are narrow, banks have not pulled back on business credit, and equity prices have risen on balance in recent months. Lenders and investors appear to remain confident that the economy will continue to expand at a decent pace.

Higher levels of labor income in the first half of the year, along with a favorable effect on disposable income of a decline in energy prices, will help support consumer spending going forward. Economies elsewhere seem to be expanding at a solid clip. Moreover, they are probably less vulnerable to spillovers from a housing-led slowdown of growth in the United States than they were to weakness in 2001. That weakness was centered in a global market for investment goods and was reflected in global declines in equity prices.

The less robust economy should present businesses with a more competitive environment in which it will be harder to pass through cost increases. In addition, the decline in energy prices, along with the leveling out of other commodity prices, will reduce cost pressures on businesses and should feed through in some measure to lower core inflation, especially as slower growth damps pricing power. The drop in energy prices has already restrained inflation expectations a bit. For all these reasons, I'm also a little more comfortable with the forecast of gradually ebbing core inflation.

Nonetheless, I still see significant upside risk to such a path for inflation. In part, this reflects my uncertainty as to the reasons for the rise in inflation this spring and summer. Feed-through of energy and other commodity prices must have contributed to some extent, and we can see evidence of this in the greater price increases for some of the more energy-intensive sectors, such as for airfares. A portion of the pickup is in the rent-of-shelter category, likely from a shift to rental housing as expectations of house-price appreciation have been scaled back. But price increases have picked up in a number of other categories, and although energy costs probably accounted for some of this acceleration, we can't dismiss the possibility that other forces were at work—for example, more general pressure of demand on potential output. A reduction of those types of pressures is still only a forecast. On the cost side, as many have commented, the compensation and unit labor cost data, while flawed in many respects, could be pointing to a risk that higher labor costs will persist, putting pressure on prices that might only be partially and reluctantly absorbed by profit margins.

In sum, Mr. Chairman, I'm a bit more comfortable with something like the path for the economy and inflation in the Greenbook forecast, but uncertainties are quite high. They might even justify the "higher than usual" description. The downward path for inflation remains at risk, and as others have noted, the costs of exceeding that path could be disproportionate. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I want to start my remarks today by reflecting on some results of the latest Duke University CFO survey. This survey is only about six or seven years old, but the one that was just concluded on September 10 has CFOs' optimism at the lowest levels in five years, and so it's continuing to show an erosion of their confidence. I found the CFOs' number 1 worry—weak consumer demand—interesting because it wasn't there before, and that uncertainty is part of what the CFOs are worrying about. Their second biggest concern is rising labor costs, which they attribute primarily to the scarcity of labor. They are anticipating that the scarcity is going to continue to drive labor costs higher. In terms of their hiring plans, they are planning now to hire fewer people than they hired last quarter. They are expecting to increase employment over the next twelve months 0.8 percent; last quarter's survey showed 1.3 percent, so that's quite a slowdown. However, they're going to increase outsourced employment 4.3 percent. Thus what is showing up is the uncertainty—wanting to use an adjustable labor force to get the flexibility because of the uncertainty. They are also trimming their capital spending plans over the next twelve months to 5.1 percent, compared with 7.5 percent last quarter. Thus the survey indicates that CFOs have growing concern; they are still optimistic overall, but I think that caution is there.

Now, in looking at the numbers myself, I'm perhaps not quite as pessimistic. Again, as several of you have said—and Dave commented in his remarks—except for housing, the economy really does look good. As you know, I've been worried about the mortgage market and housing for quite a while. In an endeavor to find something good to say, I have noticed that, in the past couple of months, the Mortgage Bankers Association index of new loan applications for purchase mortgages looks as though it's starting to level off. Very often that could be a leading indicator, so that could be a positive sign. However, as some of you have remarked, there's a lot of speculation in the housing markets that has to unwind. All the folks who bought housing for investment have to do something as they see housing prices slowing and the financing costs to carry their investments going up. How that unwinding will occur, given the substantial size of the speculative positions in some markets, is something that will need very close monitoring. I know that our supervisory staff is focusing on that, too.

People are focusing on the fact that delinquency rates in mortgages still look good. However, we've seen a very rapid increase in debt service ratios since 2004. I'm concerned, again, with the amount of adjustable-rate mortgages out there that will reprice in the months ahead. If, as we think, some of these loans, particularly subprime loans, were made mainly on the collateral value of the house and not on the affordability of the mortgage, we could see more distress in the borrowers' markets coming forward. If that's the case, it could have spillover effects on consumer spending more broadly.

On the positive side, payroll growth has been good in the past three months—128,000. It has picked up a bit, and it is significantly above the Greenbook forecast, and that gives me some optimism. It's putting more income in people's pockets to spend, and the unemployment rate has been stable. Hourly earnings, however, are rising faster. While that acceleration can support consumer spending, it contributes to my concern about where we're going in the long run on inflation.

As I look at the Greenbook forecasts since May, we've been continuing to project more and more inflation going forward. The private sector has basically been doing that in their forecasts as well. When I look at those forecasts, I'm concerned that for various reasons we have reduced our estimates of the trend rate of growth. As we bring down the trend rate of growth—and I realize that, as several have said, we're at the lower end of the private-sector growth forecasts—I worry about the disconnect. Are we seeing a slowdown in potential that others aren't? Or if we're right that potential growth is lower and the private forecasters are right that real growth is going to be faster, then we could have more inflation pressures going forward. For the first time, we are also looking at prices in 2008, and they continue to rise at over 2 percent. They've been over 2 percent for two years. I worry, from the standpoint of our credibility, about what having such a long period above 2 percent means. So I believe we will see moderation of inflation, but I think it's important to preserve our flexibility and be able to respond if these worst-case scenarios that I laid out become more troubling to us going forward.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. I'd like to make four points, a couple of which have been stated by my colleagues this morning, and then spend a little time on each of them. First, like many of you, I am more concerned about the upside risks to inflation than downside risks to output and employment. Second, the markets responded quite positively to the last FOMC, so they've been going in the right direction. The stock market has been up, the bond market has been up, energy and commodities are down, and TIPS inflation compensation measures are down. Six months ago I would have taken some comfort from that; now, six months into being a central banker, I'm worried. [Laughter] So I join the ranks of Jack and the rest of you who have been here a bit longer than I have. Third, for the first time since I've been here, I'm a little less sanguine about the supply side of the economy in looking at the business base, the cap-ex base, and the manufacturing base. But I find myself today probably more comfortable, or at least as comfortable as I've been, with the strength and resilience of consumer demand. The fourth point I would like to spend a couple of minutes on is that I think we are at the beginning of a major test of market liquidity that's happening in real time in the fixed-income markets. So let me take each of those in turn.

First, on the consumer side, consumer spending appears to be strong and resilient. As was noted at the outset, there was a strong July PCE reading, on par with the strongest gains of the year, suggesting to me that consumer demand may actually be accelerating from the second quarter into the third quarter. The Greenbook estimate of 3 percent PCE for the third quarter and 2.75 percent PCE for the fourth quarter may actually be understating the strength of the consumer, particularly with falling gas prices.

I'm also comforted by income growth and labor market conditions, which I see as likely to be far more important to consumer spending than housing wealth. Consumer income gains appear to be rising. I've made note previously of very strong tax receipts. Although they've tapered off somewhat, they continue to be robust. Tax receipts for the year are up about 12.4 percent. The past couple of months would suggest they are in the high single digits, and though there is some noise in those data, I do take some comfort from them. Other recent corroboration of labor income, with the revised NIPA data and other measures, suggests that real wage and salary income again may be accelerating. It has been noted this morning that stock options and bonus payments may have had an effect in the first quarter, creating a bit of noise in those data. However, they should also remind us of the wealth effect of equity gains, which may partially offset the negative wealth effect from housing, particularly with 100 million members of the investor class. I think that's something that needs to be considered in our thinking about the strength of the consumer during the forecast period. Finally, as I think Governor Bies noted, the labor markets remain reasonably tight. Despite the softness in housing, unemployment insurance claims and unemployment rates remain quite encouraging.

Turning for a moment to business, about which I am perhaps a little less optimistic than I've been before, industrial production is still reasonably strong but, perhaps disappointingly, has flattened for August, even though the July numbers appeared to be on an upward trend. When I looked back over the past 24 monthly readings for 2004 and 2005, both of IP and retail sales, I found that each declined about six times, so I'm not sure that we're seeing a new trend here. My own sense of where IP is in September is that it's remarkably strong, but, again, I have some caution that I didn't have before. One other note—unlike the Greenbook, I sense that exports are likely to make a real, meaningful contribution to GDP during the forecast period.

In terms of capital expenditure growth rates, another survey I'd like to mention is the Business Roundtable survey that came out a couple of days ago. It was more negative on capital expenditures than it has ever been. I would say that the group has a mixed record in calling inflection points, but the survey results, nonetheless, suggest that only a little less than 40 percent expect increased cap-ex in the next six months, whereas about half said that cap-ex would remain constant over that period. Perhaps that's an effort to protect margins with higher costs that could be only partially passed through. As I've noted before, earnings growth continues to meet or beat expectations, certainly through the second and third quarters, and my own sense is that fourth-quarter earnings will also be fine, probably still at the double-digit rates of about 10 or 11 percent. Perhaps that explains some of the taking the foot off the accelerator in terms of capital expenditures.

In terms of housing, to add a bit to the previous discussion, my own sense is that the residential sector may have, in fact, crowded out some nonresidential loans during the most recent boom and that nonresidential construction was marked up sharply in the second quarter, to an annual growth rate of 22 percent. My sense is also that the market's capital allocation function is working well. C&I loans are growing about 15 percent or more, perhaps the highest rate in the past 20 or 25 years, and we'll probably see a little more capital allocation to this nonresidential sector. Whereas the Greenbook assumes a significant deceleration in this group, I think that there’s reason for some upside surprise. As a result, I expect stronger GDP for the second half of ’06 than the Greenbook does.

Turning to inflation, I think that inflation risks have not materially receded, though we’ve probably seen acceleration stopping. That is, we’ve seen the top, but the new direction is not clear. One measure that I’ll look to over the next six weeks is what’s going on in the capital markets. Since we last met, ten-year yields have probably moved down about 15 basis points, and the Greenbook reports that there should be a slowdown in business debt financing. That statement of the Greenbook is probably reflected in the data that we’ve seen in July and August in terms of the capital markets. But the test of liquidity to which I referred will be a big supply/demand test over the course of the next six or seven weeks. Perhaps $150 billion in funding is coming to market from the bank loan market, the leveraged loan market, high yield and investment grade. Admittedly, in that $150 billion number, which stacks up as a big number even compared with only a couple of years ago, when we would see financings over a year of $175 billion, there are some elephant deals, and they are probably distorting that number a bit. HCA is coming to market with a $20 billion deal, as well as a couple of other major leveraged buyouts.

The liquidity in those capital markets appears to be incredibly robust at this moment; there are massive pipelines. You hear words like “euphoria.” I would say that the capital markets are probably more profitable and more robust at this moment, or at least going into the six-week opportunity, than they have perhaps ever been. A significant variety of participants are playing. This is a function of huge sovereign debt inflows and of significant liability management by issuers—some of the CFOs to whom Governor Bies was speaking. Investors at this moment appear to have very little leverage in terms of the pricing of these deals or in terms of some of the covenant protections that were referenced at an earlier meeting. Previously, I had said that, particularly in the investment-grade market, we were seeing issuers hesitate to come to market because they didn’t want to negotiate their covenants away. In the event that they were to be taken out by a leveraged-buyout player, they wouldn’t want to have a change-of-control premium. Now that these markets are as robust as they are, those same brand-name issuers are coming back to the market, and at this point it seems as though they will likely get their pricing done. So, I do not yet have a final determination of what this pipeline looks like; but if all goes through, it will suggest to me that there has been rather massive liquidity during this period. Other measures of liquidity appear to be somewhat more encouraging from my perspective. The commodities markets have been mentioned. They’ve probably had some hot money come out of them, with a lot of retail investors, both directly and through pension funds, coming in too late and maybe exiting for good, as well as some very encouraging news about the TIPS markets, which were referenced previously.

In sum, I would say that the markets seem to be very impressed by our letting the economy develop, particularly in the next couple of quarters, and I’m impressed by the market’s confidence in us. I think that it puts a significant responsibility on us and is probably the only way I can reconcile the rather robust gains in the equity markets and in the debt markets over this period. That is, the markets believe that somehow we’re going to manage to thread the needle and nail the perfect landing. There is, I think, increasingly a one-way bet in the bond markets in that they believe that there is a degree of accommodation and they have built in a degree of loosening in the forecast period, which we don’t have a proper understanding of. Only a couple of months ago we were describing, and the Chairman described, an economy in transition and the very wide tails around that. We still have the wide tails, but the markets seem to think that we're going to nail this landing.

I think the minutes from the last meeting faithfully captured our concerns about the appreciable upside risks remaining. Either the markets didn't buy that description, or they were convinced that we were going to act with an incredibly deft touch to stop that inflation. All in all, I would say that in the markets there is less dispersion of views than is probably healthy and less dispersion of views over these different scenarios than we found ourselves discussing some time ago. So with that, I think we'll have a more robust discussion in the next round. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you very much. Unfortunately, I think we find ourselves in an uncomfortable position like that of six weeks ago, with a continuing mix of inflationary pressures and decelerating economic growth at the same time. I think the fundamentals are in place for a continued moderation of growth but not a contraction, much as the Greenbook describes. Obviously, housing is a risk that everyone has talked about. But the key, as many people have also mentioned, is maintaining contained inflation expectations, and that comes down to thinking about whether some of the factors that we've been seeing have been more transitory or more persistent.

Let me first talk about growth and go through the C plus I plus G plus net exports. I would agree with the staff's characterization that world economic growth is not quite as strong as some others have put forward. I don't think we're going to be seeing an enormous export boom. Also, as briefly mentioned, I see very little on the government stimulus side. Tax revenues, as Governor Warsh mentioned, were very high. Spending is being kept relatively tight. On investment, we're seeing some strength in capital spending. My concern is, if consumption goes as low as the Greenbook suggests, what the return on this capital spending will be. Is it going into the right areas? I was a little concerned when President Poole mentioned that the air freight company is expanding rapidly but the on-the-ground delivery company is not expanding at all. So are they going to have to invest in parachutes to get these in? [Laughter] But that is precisely the concern that I have—that capital spending may not conform perfectly to what consumption demand is going to be. We certainly saw this in the late 1990s and early 2000s. I'm just a bit worried about that now, especially given the potential tension between slowing consumption and robust investment growth.

Now, regarding consumption—we've talked about the potential support from lower energy prices and some positive wealth effect from stronger equity markets, but obviously housing is one key here. It's a key partially in overall investment but also in the uncertainty that it causes in consumers' minds. Housing is one of the worst areas for data. It's very difficult for us to have any concept of what prices are doing because it's not a market like any other. We do have the Case-Schiller index, and we do have some better indexes that people are now betting on, but they're still very poor indicators of prices relative to the indicators we have in other markets. We also know that there can be queues and that extras can be thrown in, so there's a lot of uncertainty with respect to where prices are going. That concerns me quite a bit because I think we just don't have a good handle on it. Permits and starts have continued to come down from where they were at our last meeting and are now at levels of the beginning of 2003 or even starting to slip into 2002. If they flatten out there, the housing sector is still historically reasonably good. But there's no indication that we're necessarily at a turning point and that things are going to flatten out. There is the wealth effect, the direct effect on people's consumption behavior of lower wealth going forward, and also the confidence effect. We don't have a perfect analogy with the previous times in which we've seen these housing downturns—we have a different context in that the economy is broadly more robust—and so I think it's less likely that we're going to see a major housing problem. But I think it is a real risk, and we have to be sensitive to it.

On the inflation outlook, we have to come back to transitory versus more-persistent components, as many people have mentioned in the discussion. Obviously, people are heartened that energy prices have come down, but I certainly would not put the same bet on the energy markets that one trader did in a hedge fund that got into a little trouble recently because we know that energy prices can move in ways we don't expect. So I don't want to take too much from that. I think it's appropriate in the Greenbook to use the market's expectations. What measure do we have other than market expectations? If we did have a better measure, then we'd be running one of those hedge funds. However, there's a lot of uncertainty around that measure. So I certainly don't want to bet on better inflation going forward just because we've suddenly seen a 15 percent decline in oil prices over the past six weeks. That said, it's heartening that energy prices are unlikely to lead to greater inflationary pressures going forward than those when we paused six weeks ago.

The rise in compensation is obviously troublesome—not if you are an employee receiving the higher compensation, but from our point of view. However, a lot of tension is in those data because we have the compensation numbers versus the ECI. There's a big statistical discrepancy between gross domestic income and gross domestic product. It's possible that some of the increase in compensation will be revised away, and we'll see actually higher productivity growth. We just don't know, and it may be a while before we see it. Also, as we discussed a lot last time but not this time, the continuing fairly wide margins that businesses are experiencing may come under more pressure and may absorb some of the increases in labor compensation. How much is uncertain, but that may be one potential offset.

As many people have said, we can't become complacent. Inflation expectations have behaved reasonably well since we paused at the last meeting, which is heartening in that the markets believe that inflation is reasonably under control in the near to medium term and even in the longer term. It's hard to find evidence of increases in inflation expectations, but as many people have said, that does not mean that we don't have to worry. We have to worry a lot because the key is keeping those expectations well contained. I think we're in a situation in which we can do that. Slowing growth is not going to give us more of a benefit. The flatness of the Phillips curve, which people have talked about, is what the data have been over the past ten to fifteen years in the United States and most other countries. So even if there is a bit more slowdown, we are not necessarily going to get the potential benefit in significantly lower inflation pressures—maybe a little but not very much. So we still have to worry about the upside on inflation, and that's why maintaining our credibility is of utmost importance.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. First, I just should say that it's a great pleasure to return to the Federal Reserve System—I have so many friends here at the table and around the table. It's also very nice to move to a slightly more comfortable chair. [Laughter]

MR. KROSZNER. It's called the hot seat. [Laughter]

MR. MISHKIN. Many of you know I have an upbeat personality—some might actually say loud—but certainly upbeat. The way I look at the forecast and the situation with the economy is quite positive in the sense that what we're seeing, really, is a return to normalcy and a more balanced economy. The excesses in the housing sector seem to be unwinding in an acceptable way, so I think it is quite reasonable in terms of the Greenbook forecast to think that the spillover here is not going to be a big problem because we're actually moving resources from a sector that had too much going into it, into sectors that need to have more resources at the present time. So in that sense, I'm actually quite positive. The other thing that I am quite comfortable with in the Greenbook forecast—though, clearly, there's uncertainty—is that we're going to see a decelerating core inflation rate. Furthermore, when we look at inflation expectations, they seem to be very well contained and seem also to have responded well to the pause at the last meeting.

However, I should say that, although we've seen that inflation expectations are well anchored, there's a question about whether they're anchored at quite the right level. They seem to be anchored somewhere around 2½ percent on the CPI, and that is probably with a differential between the CPI and the PCE of about ½ percentage point, or 50 basis points. It still seems to be somewhat on the high side in terms of what many people on the Committee have expressed is their comfort zone. So I think that is a concern. There is a significant probability that things may not turn out so rosy on the output front—we should have a concern that things could go somewhat wrong in terms of the housing sector. If that happened, we might see much lower output growth. There is a reasonable probability of recession. It's mentioned in the Greenbook. I think your numbers are quite reasonable. So in that context, we could actually have lower output, a wider output gap, and some actual deceleration of inflation. I agreed very much with the conclusion that you came to because it's reasonable to think that the long-run inflation we're moving to is around 2 percent unless we get one of the scenarios with a lot more softness. That the deceleration is not going to go much below the Greenbook forecast of around 2 percent by 2008 does cause me a bit of concern.

I'm not sure that I would describe the risks as unbalanced. For me, in terms of a forecast, probably I would be comfortable saying they're balanced. However, I think inflation is too high in the forecast and, in that context, does require much more vigilance. Of course, that will be reflected in the discussion later today. Thank you.

CHAIRMAN BERNANKE. Thank you. Let me just summarize quickly what I heard around the table, and then I'd like to make some additional comments of my own on the economy. The sense is that, on the real side, there's a two-tier economy. There's the housing sector and maybe autos, and there's everything else. On housing, there's agreement that a significant correction is occurring, but the views of the risks vary among participants. In particular, some feel that this still could be a quite deep correction, and others say that the fundamentals, such as incomes, interest rates, and so on, will ultimately support housing. With respect to the rest of the real economy, there were some mixed reports; but on the whole, people characterized it as a full employment economy. We're generally more optimistic than the Greenbook both for later this year and for 2007. In particular, people noted higher incomes and stock prices and lower oil prices, which should support consumption growth and business activity. At least for now, I heard only a few participants being particularly concerned about the possible knock-on effects of housing on consumption and investment. The labor market remains solid, and as we've been noting for a number of meetings, attracting more highly skilled workers remains difficult.

On inflation, some noted somewhat better intermeeting news, with the possible exception of the higher compensation data. But a lot of uncertainty was expressed about where inflation will go, reflecting in part our incomplete knowledge of the determinants of inflation and also some mixed anecdotal evidence. However, I hear very clearly a definite unhappiness with the level of core inflation and with the amount of time that is projected to return it to a level of less than 2 percent. The principal concern is that our credibility will be damaged if inflation remains too high for too long. So I would summarize the discussion—I hope reasonably accurately—by saying that inflation remains the predominant risk but there is still quite a bit of uncertainty about the evolution of the economy in the next few quarters.

Let me add a few comments to this—first about inflation and then about the real economy. I do believe that the intermeeting news on inflation was more good than bad, particularly relative to the fact that inflation is a lagging indicator and that it would not have been incredibly surprising if we had gotten 0.3 readings the past two months. I'll talk first about some of the positive news, and then I'll address some of the risks going forward.

First, there is evidence that the momentum of inflation has reversed. When I gave my speech on June 5, which many of you followed up on, I emphasized the three- and six-month rates of inflation as indicating that an acceleration, a rising inflation pattern, was occurring. It now appears that the three-month rate of inflation peaked in May. So, for example, in May, the core PCE was 3.06 on a three-month basis; in July, it was 2.24. The market-based core PCE was 3.00 in May, and in July it was 2.11. The core CPI was a high 3.79 in May, and as of the last reading in August, it was 2.95. So in some sense the direction has turned, and the momentum has been broken, and I think that has been reflected in views in the marketplace.

Now, there hasn't been much discussion of the details of this inflation report, and I think it's actually quite significant. In particular, a very important factor in both the level and the change in inflation is owners' equivalent rent (OER); we've discussed this issue before. OER is

41 percent of core CPI and 19 percent of core PCE. Although OER has been decelerating recently, it's still at a three-month rate of 4.4 percent, relative to an annual rate of 2.66 percent in 2005. So that difference accounts for a great deal of the change between where we are today on a three-month basis versus where we were in 2005. The good news is that OER and other measures of rent of shelter have been coming down more quickly than many outside economists expected but in line with what our staff more or less expected; indeed, the number was 3 percent for August. So if it just stayed there or came down a bit more, we would see better short-term numbers for inflation going forward.

Other positive news on inflation obviously includes energy and commodity prices. For energy the dominant factors are supply-side factors over which we have no control—hurricanes or the lack thereof and geopolitical factors. But it's also interesting that metals and some other commodities are off their peaks. That suggests to me that, at least on the margin, some prospect of slowing economic activity and rising interest rates around the world may have taken a bit of the pressure off the commodity prices. We also have had some indication since the last meeting that the economy will be slower than we thought. Clearly, the news on autos and housing was in a negative direction, and granting the flatness of the Phillips curve, all else being equal, that will take some pressure off utilization and pricing power. Finally, I would argue that expectations are, in fact, really quite well contained. Around this table, we're getting used to talking about core inflation. The inflation that people see, of course, is headline inflation, and ultimately that should be our target as well. Over the past year or two, headline inflation has gone well above what we would consider reasonable levels, and yet TIPS indicators, survey indicators, and outside forecasters have not markedly changed their long-term inflation forecast. So I take the credibility issue very seriously, but I don't think that there is much evidence yet that our credibility has been seriously impaired.

On the negative side, the main piece of news was the higher compensation in the first and second quarters. There is not yet much evidence that labor costs are affecting inflation. We've already discussed the issues with the measurement of compensation per hour. Let me just note that, if you look at the components of inflation that have moved the most, you get things like rent, airfares, used cars, and things of that sort. You don't see much movement in services, for example, which are more labor intensive. So I don't think that labor costs have yet infected the inflation rate; indeed, we know there's a weak correlation between these labor cost measures and inflation. However, and let me be clear about this, I think that the key risk to our inflation forecast is that markets will be tighter, labor markets will be tighter, and wages will grow more quickly, and that will produce more inflation than we would like. So I would summarize the inflation situation as having had some modest improvement, some encouragement, but I certainly agree with the general sentiment around the table that the level of core inflation is certainly too high.

On the real side, we paused at the last meeting to observe the lagged effects on real activity of our previous interest rate moves. The evidence suggests that, indeed, interest-sensitive sectors did worsen over the intermeeting period. We saw the second significant markdown in a row by the Greenbook for housing, and we've seen autos decline as well. To this point, I agree that the economy except for housing is reasonably strong and that there are factors supporting consumption particularly, going forward.

So as we look forward, I think there are two issues. The first is how severe the contraction in housing will be. To be honest, we don't really know. We're talking, again, about an asset price correction, and it's difficult, in principle, to know how far that will adjust. The second issue is how much spillover there will be from any housing correction to the rest of the economy. I don't have quite as much confidence as some people around the table that there will be no spillover effect. Any spillover effect would be a lagged effect, and it remains to be seen how much effect there might be. But I agree that the economy except for housing and autos is still pretty strong, and we do not yet see any significant spillover from housing.

Please look at the figure that was distributed.[2] I want to talk a bit about the risks in both directions as we think about policy. Let me just describe the two panels to you and then draw a conclusion from them. The top panel shows the four-quarter difference in the unemployment rate—that is, the unemployment rate in the fourth quarter of this year minus the unemployment rate in the fourth quarter of last year, going back to about 1950. The blue bars show recession periods. The dashed line is at zero, and the solid horizontal line is at 0.3 percentage point. What you see is that, without exception, every time since 1950 that the unemployment rate has risen as much as 0.3 percentage point over a year, it has continued to rise, and we've seen a recession. That suggests that having unemployment rise just a few tenths and keeping it there is not quite so easy as our linear models might suggest. In the bottom panel, you see four-quarter changes in the growth of real GDP. The dotted line shows zero, and the solid line arbitrarily shows 2 percent real growth. Again, these are four-quarter differences. With the minor exception of 1956, again in no case was real GDP growth below 2 percent sustained for four quarters without an NBER recession. I think a very interesting case is 1995-96—the famous soft landing that was engineered in the mid-1990s. You'll notice the line just touches the 2 percent zone without crossing it. [Laughter]

[2] The figure to which Chairman Bernanke refers is appended to this transcript (appendix 2).

So what am I saying here? I'm only saying that, if we believe that we need to have output below potential to help arrest inflation pressures, it is a delicate operation, and we may have a very narrow channel to navigate as we go forward. We should pay very close attention to how the economy is evolving at this particular moment because I think the uncertainty and the potential nonlinearity at this juncture are greater than what we normally face. I'll stop there, and we can begin our second round. Oh, I'm sorry—Vincent. [Laughter]

MR. REINHART. I only speak when asked, Mr. Chairman. [Laughter]

CHAIRMAN BERNANKE. That is a good practice. [Laughter]

MS. MINEHAN. Since when? [Laughter]

MR. REINHART.[3] Thank you, Mr. Chairman and some participants. [Laughter] Over the intermeeting period, tumbling oil prices, better-behaved inflation, and the minutes of the August meeting, which conveyed a more widespread disinclination to tighten than investors suspected, pulled nominal interest rates lower. As can be seen by the solid line in the upper left panel of your first exhibit, the rate on three-month Eurodollar futures expiring this December declined a touch, on net, and is now consistent with the federal funds rate remaining at 5¼ percent for the remainder of the year. Investors seem to expect policy easing thereafter, in that the contract expiring one year later has a rate about ½ percentage point lower. This can be seen most clearly by the black line in the upper right panel, which shows that the path expected for the federal funds rate over the next two years has a decidedly negative slope.

As indicated by the shift from the black dotted to the black solid line in the lower left panel, this revision to policy expectations was associated with a roughly parallel step downward in the term structure of nominal Treasury yields over the intermeeting period. The yield curve for indexed securities moved up closer to its nominal counterpart—the shift from the dotted to the solid red line—implying that the difference, inflation compensation, declined.

These relative movements can be made more precise by putting them in terms of changes in implied forward rates, as at the right. Nominal forward rates (the top panel) declined in a relatively uniform fashion, from 8 to 15 basis points. The rotation up in the real yield curve, however, was associated with sizable increases in short-term real forward rates and declines at longer horizons. The arithmetic difference between the two is plotted in the bottom right panel: Inflation compensation fell noticeably at short horizons, but the decline tapered off as the maturity lengthened.

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

One way to tie these disparate movements into a neat package is to argue that the substantial decline in oil prices in recent weeks represents a disinflationary impetus that is anticipated to be only partly offset by you. That is, nominal rates will move lower but by less than the drop in inflation so as to keep real interest rates higher for a time. In this story, the decline in oil prices represents an opportunity to disinflate—an opportunity that investors expect you to take by being slow to lower nominal interest rates. The same story, however, can take on a darker hue if it is argued that the fall in the prices of oil and other commodities evidenced a slowing in global activity brought on at least in part by your previous 17 policy firmings—that is, this opportunity for disinflation could be one of your own making.

Either explanation—one of omission or one of commission—produces a moderation in spending and a drift down in inflation that would seem to be consistent with holding the funds rate at 5¼ percent for now, a possibility examined in more detail in exhibit 2. At its August meeting, the Committee assessed the risks to be such that it could hold policy unchanged given its expectation that growth would moderate and inflation decline. The information received since then would seem to strengthen that determination. As shown in the top left panel, inflation compensation measured in the Treasury market is about unchanged at the longer horizon (the red line) and distinctly lower in the near term (the black line). How much of this decline represents a drop in inflation expectations as opposed to a decline in inflation risk premiums is hard to say, but the evidence at the right may be suggestive. Merrill Lynch conducts a monthly survey of global fund managers about their views of macroeconomic risks and portfolio inclinations. More than 200 of them typically reply, and last month an increased share of them were of the view that inflation would be lower, rather than higher, than in recent months. This view seems to be underpinned by the expectation that economic growth will moderate so that resource slack will open up, perhaps as in the staff forecast in the middle left panel. Indeed, when asked about global economic growth, the fund managers surveyed by Merrill Lynch mostly expected it to slow, as at the middle right, with more of them of that view than earlier in the year.

As can be seen directly below, the slowing is not anticipated by investors to be so precipitous as to tip the world economy into recession. More than 90 percent of the managers view such an outcome as unlikely. Thus, they wouldn't seem to be putting much weight on the flatness of the yield curve, plotted at the bottom left, as a leading indication of recession—nor would you if you're inclined to keep policy on hold. In that regard, as the chart makes clear, the yield curve has had some predictive power for recession over the past forty years. For instance, the inversion of the term structure in 2000 was sending a signal that, in retrospect, might have warranted a response. This indicator may seem less compelling now for two reasons. First, a flattening yield curve has sent false signals as well over the years, including of recessions that didn't occur in the mid-1990s. Second, much of the downward tilting of the term structure seems due to a decline in term premiums, which might be a sign of reduced uncertainty rather than a sign of increased economic vulnerabilities.

Indeed, some Committee members may be far from seeing the economy as vulnerable—perhaps to the point of inclining them toward firming policy 25 basis points, as in exhibit 3. In particular, financial market participants do not seem to have heard the message of the August statement that the risks were tilted toward higher policy rates. Rather, as shown in the top left panel by the spread of the December 2007 Eurodollar futures contract below the December 2006 one, about 50 basis points of easing is expected next year. This expectation of ease may be contributing to low credit spreads (the top center panel) and the recent rise in equity prices (the top right panel). This financial impetus might be seen as a reason that spending will not moderate sufficiently to make a noticeable dent in inflation.

Even if those expectations are wrung out of financial market prices over time—as in the staff forecast—the resulting path of inflation may not be acceptable to the Committee. As shown in the middle panel, core PCE inflation is projected by the staff to remain above 2 percent through the end of 2008, which would mark the fifth consecutive year of such an outcome. The survey expectations of CPI inflation—plotted at the bottom left—similarly remain well above 2 percent. While survey responses came down over the intermeeting period, you might discern a slight uptrend in the past few years that could be taken as an erosion of the public's confidence. In such a circumstance, members may believe that more-acceptable progress toward price stability will likely involve a firmer stance of policy, a judgment that would be strengthened if you thought the spike in the growth of compensation per hour plotted at the right was not as likely to roll back as the staff projects.

The Bluebook lived up to its title, "Monetary Policy Alternatives," by offering the five different options given in exhibit 4—three formal ones and two variants (which are shaded) that were discussed in the text. If your intent is to solidify current market expectations of easing, switching to balanced risks, as in A, probably has some appeal. The words of alternative B were designed to leave market rates about unchanged, whereas B+ emphasizes that tightening is more likely than easing. It doesn't really say anything new, but we thought the force of repetition might get the attention of market participants. The alternative labeled C- couples tightening with a removal of the rate bias, signaling that the Committee may be done, whereas C imposes considerable additional restraint by retaining an assessment of upside risks even after firming.

Your last exhibit repeats table 1 from the Bluebook with a minor change noted in red in the second row.

CHAIRMAN BERNANKE. We are ready for the go-round now. Would anyone like to speak? President Poole.

MR. POOLE. Am I the only taker to be number one? [Laughter] Thank you, Mr. Chairman. I want to start with two observations. First, the distribution of the market's outlook for the federal funds rate six months ahead—and the briefing paper that appeared in my hotel room last night has that shown on exhibit 1—is pretty symmetrical, although it actually has a bit more probability weight on declines in the rate than increases. But roughly speaking, it accords with my own view—a one-third chance that we will stay where we are, a one-third chance that it will be appropriate to ease, and a one-third chance that we will want to increase the rate. I come out with a very symmetrical view myself. I think of the views around the table—some people are probably there, some people are probably skewed on one side and some on the other side, but I come out very much in the middle.

My second observation continues a point that Tim Geithner made a few minutes ago. I had several conversations at Jackson Hole with Wall Street economists and journalists, and they said, quite frankly, that they really do not believe that our effective inflation target is 1 to 2 percent. They believe we have morphed into 1½ to 2½ percent, and no one thought that we were really going to do anything over time to bring it down to 1 to 2. I think that is very unfortunate because so many of us have talked about 1 to 2. Also, it seems to me that in the future it would be easy for people to say, "Well, it is going to be inconvenient. Let's just sort of settle at 2 to 3." They have already said that they would be at 1½ to 2½ effectively by the behavior of the Committee. Now, if we get data in the coming months that are unfortunate on the inflation side and lead us to increase our inflation forecast in the absence of any further policy action, I would certainly be on the side saying that we ought to act. We should firm policy so that we do not allow the forecast inflation to rise from where it is now.

One reason that I do not want the explicit reference to housing to be in the statement is that I would take that position even if housing were continuing to struggle, because I think it is extremely important that we not allow inflation to ratchet up. If housing is a casualty of that policy, we had better accept that situation. I would not like to see a mixed market signal because I would not want the market to believe that continuing weakness in housing would deflect us from acting as necessary to keep inflation from rising further. I think the explicit reference to housing in the statement conditions the market to think about our policy going forward in the wrong way.

At the same time, there is a clear possibility that we could see data in coming months that would be weaker than we now anticipate in the Greenbook forecast. What I know about forecasting error says that you have to think that coming in weaker on the real economy is a real, live possibility. I hope that we do not get unfortunate news on inflation and a downside on the real economy together, but I do not rule out that possibility.

I think it is unlikely, if we receive substantially weak data on the real economy, that we would be raising rates into a recession. But quite frankly, I would like for us to condition the market to accept this symmetrical view of the risks that we face going forward and for us not to have language in our statement that tilts us toward tightening. My own sense is that an asymmetric tilt toward tightening would not serve us well should we get downside surprises in the real economy. Indeed, we should be quite happy to see longer-term rates weaken in the event of weak data on the real economy. To have the market respond that way helps to serve as a built-in stabilizer for economic activity. It would tend to support housing and other interest-sensitive sectors, and we should encourage rather than discourage that response in the market.

Let’s see. What else do I want to say here? I would observe that the Greenbook forecast of a prolonged period of an inverted yield curve has no historical precedent. Usually the yield curve is inverted in the process of going from here to there, and you do not just sort of settle there. So I think that this situation is likely to be resolved either in the direction of higher long-term rates, as news on the real economy or inflation comes through in that direction or in the direction of lower short-term rates, for reasons I was just outlining; and I don't know which direction it will be.

My view of the current stance of policy is that it is moderately restrictive. Money growth, whether measured by MZM (Money Zero Maturity) or by M2, has been modest, and in fact, real balances have been flat to declining for a year or more, which would be a rather traditional sign that our policy is restrictive. Thank you.

CHAIRMAN BERNANKE. Thank you. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I appreciate your passing out this sheet and talking about it. I think the lesson here is that these things do not always go as gradually as forecast, and once things get going in one direction, there is more momentum than is built into our longer-term forecasts.

In terms of policy, as you know I would have preferred raising rates at our last meeting, and I think the overall contours of the resource gap and the inflation forecast are pretty much the same as they were last time. I still think that policy will need to be tightened further to bring inflation back into my comfort zone within a reasonable period of time. But given our decision to pause last month, I do not feel that we should move today. We told the public that we paused to assess incoming data, and I think it requires more than one meeting's worth of data to assess that. In fact, if we did move today, it would be a signal that we are just reacting to little snippets of information, and we are trying to dissuade people from thinking that. But I am concerned about how markets viewed our last meeting. We talked last time about a hawkish pause. Generally the markets didn't interpret it that way. They may be more optimistic about inflation, but as we know, the futures market is expecting us to cut rates. I share a sense of what President Poole talked about—that market analysts and others are saying that we are not really serious about this 1 to 2 percent that many of us have talked about; they think our zone is somewhere higher.

So when you look at these options from A to Z—A to C [laughter], there are lots of options—that Vince has distributed, I am in the B+ category. But I think we should not put that phrase "policy is more likely to firm than ease going forward" in the statement. However, I think that it is the sense of this Committee, and I think it should be reflected in the minutes.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Well, so far it looks as though our decision to pause at the last meeting was a sound one, and I emphasize "so far" because we obviously have not received a lot of additional information. I think the reaction in the financial markets has been encouraging in that, as best as I can judge, the news was received that it is a sensible decision, inflation expectations have remained well anchored, and so forth. My take on the incoming data has not changed my view of the decision to pause last time, which I favored, and I think we are well positioned at the moment, especially when we continue to allow for the lags presumably stemming from our previous actions. So I favor staying where we are today.

As far as the language is concerned, I favor the language of alternative B, as written. Vince indicated that perhaps financial market participants did not quite receive the message, but I thought the message was fairly clear. It talks about "any additional firming," which is quite explicit and allows, as far as I can see, flexibility if we need it to go in the other direction with the last phrase in the risk assessment in section 4. So I am comfortable with the language and think that at this stage we should just stay where we are.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Well, Mr. Chairman, I am somewhere between Mr. Moskow and our distinguished president from Minneapolis, but I am biased toward B+. My board, as I indicated earlier, was in favor of ratcheting up the discount rate. One of their concerns that I did not voice in our discussion previously was about how permanent or, rather, how temporary this reduction in energy price is likely to be, and as you know, we have a heavy weight of significant oil operators on our board. The only statement one can make with assurance—and Karen referred to this during the analysis period—is that we are likely to have volatility. We cannot take or assume great confidence in terms of continued direction.

In alternative B, section 3, the words that I find most objectionable are "reflecting reduced impetus from energy prices." It is a little too soon to tell, and the language sends a mixed signal because we spent, under our previous leadership, a tremendous amount of time emphasizing core PCE, which excludes energy. I take your point, which is absolutely appropriate in my view, that we need to be aware that the rest of the world looks at the CPI and does not necessarily think about core PCE ex-food and ex-energy because they have to eat and they have to drive. I would be in favor of the B+ column, Mr. Chairman. I would consider striking the words "policy is more likely to firm than ease going forward," but Vince makes a good point: There is some value to the force of repetition. What I worry about most is expectations creep, and I do agree that what I am hearing from outside and what I heard not just at Jackson Hole but elsewhere is that we are too willing to accept an inflation target that ranges up to 3 percent. I would be adamantly against accepting that kind of inflation. So I think it is important to reiterate our bias and to do it with a deft hand. We should not do it in such a way that tilts us into the risk that you pointed out in your charts of triggering recession, but we nonetheless should indicate that we are firm. So I am a B+ man, even at this table of A+ students.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I'm in favor of maintaining the current stance of policy. I think that is the best chance we have at this juncture for having growth modestly below the growth rate of potential and inflation gradually ebbing. I am not as dissatisfied with that path as maybe some others around the table. After the inflation surprise of earlier this year partly related to an energy shock, a gradual decline in inflation is about as good as we can expect to do, and I do not think that is going to impair our credibility if people see that happening.

Now, I admit that that credibility may be built around a slightly higher inflation rate than others want to see. In that regard, I think we are in desperate need of the conversation we want to have at the next meeting about what our targets should be; how we should enunciate them; and once we are away from any target if we do enunciate it, how we should get back. But at this point I do not see any risk to our credibility from something that looks like the path that I expect to happen with keeping policy unchanged for now.

Until housing weakens further and begins to spill over into other sectors, the risk to our dual mandate comes primarily on the inflation side. So I am very comfortable with the inflation risk language. I do not think our reference to housing in section 2 undercuts our sense that we are worried about inflation and would act against it. I think it helps explain section 3, which says why we think inflation would moderate. So it does not bother me that much.

I am somewhat puzzled by the behavior of financial markets with respect to the expected policy. I am not puzzled so much by the downward tilt. That is roughly consistent with growth below potential and a gradual retreat of inflation and is not all that different from some of the Taylor rule simulations in the Bluebook, including some of those with a 1½ percent inflation target. It is also consistent with the Committee's past actions judging from the forecast-based rule. But it does not seem to give much weight to the upside inflation risk that we sense or to the Committee's priority of seeking assurance that inflation is moderating. More perplexing—and I think Vice Chairman Geithner brought this up—is the apparent certainty with which market participants seem to view this expected path; they do not seem to share our uncertainty or at least my uncertainty about the future course of policy. At some point, expected volatilities will rise, and some market participants will suffer losses; but for now the implied path of rates or the low expected volatility is not really impeding our ability to achieve our goals, and I would not attempt to use the announcement to change expectations in markets. I do not think they are so far off that they're stopping us from getting where we want to go. So I would not favor B+. I would favor the language of B. Thank you.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Mr. Chairman, based on my assessment of the economic outlook, I think we should maintain the funds rate at 5¼ percent, which as others have said is modestly restrictive, and I counsel what I would refer to as rational patience here as we work through this. I continue to hold the view that the current policy stance, along with the lagged effects of past tightening, will lead to a moderation of inflation going forward—and that does not deny that upside risks to inflation do, in fact, remain.

Just quickly, I would like to say that I think credibility is extremely important for the Federal Reserve and that we risk the issue of credibility much more when we are at 1 percent than when we are at 5¼ percent, which is where we are now, in terms of upside inflationary risk. We are moderately restrictive, and we do not want to overreact. With that in mind, although there are also downside risks to growth, I want to be very clear to the markets and to the public that any near-term easing in policy is not likely. Indeed, I believe, first, that we should maintain our current policy stance until we see evidence of significant systematic declines in inflation. We should make that clear. Second, if we get evidence that inflation is not moderating, I would be prepared at that point to support additional tightening; but I think we should have that evidence before we reengage in any policy tightening.

On the press statement, I am in favor of B+. We should be very firm about our inflation position and about our commitment to bringing inflation down. We should not overreact; and with the moderately tight policy that we have now, we can see inflation come down systematically over time. Thank you.

CHAIRMAN BERNANKE. Thank you. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. I don't know how we would rationalize or explain a departure today from the pause that we decided on at our last meeting. Also, I think that what we have learned since our last meeting does not substantially alter our medium-term forecast. Therefore, I strongly favor another hold decision today, along with a statement that continues to make it very clear that, if our forecast changes, especially with regard to the expectation of moderating inflation, our policy position would also be reassessed.

I also want to echo the earlier observation of President Stern on the evidence in the memos that were circulated before the meeting. Despite the lack of correlation between resource utilization and inflation and a decline in the influence of energy prices on core inflation, we continue to put considerable weight on these relationships in our statements. I think there are issues here that deserve a good discussion at some point.

Finally, it seems clear that we are really struggling to understand inflation dynamics and see a need for a more empirically robust framework to guide our decisionmaking. I assume this area will receive even more research emphasis and will be a fundamental part of the upcoming debate you will have on how to target, forecast, and talk about inflation and the inflation outlook. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I favored a pause at the last meeting, and I haven't really heard or seen anything since then that would cause me to change that view. Consequently, maintaining the pause seems like the right thing to do, and I favor the language in alternative B in communicating that decision. I would also like to add that I share the concern that most have expressed today that the trajectory of inflation may not head downward fast enough. However, I favor the current policy stance because I believe that the rates we have already implemented will bring the inflation rate down and because, as I said earlier, overtightening when the economy appears to be moderating more than we anticipated even just a couple of months ago is a concern to me. Mr. Chairman, the chart that you handed out today reaffirms that concern. Even though I am convinced that the inflation rate will fall, I am less convinced about how much and when. Right now, I am satisfied with breaking the momentum in the inflation process and will wait to see whether the moderation in the economy does stabilize. I can envision, as others have said today, a point in the future when our policy will have to be more ambitious to bring the rate of inflation down over time. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. At our last meeting, my inclination was to favor an additional 25 basis point increase in the fed funds rate. In my view, there has been very little change in the economic case for some additional policy firming. The incoming data have not persuaded me to think that growth would be considerably below trend in '07, although I do think that there will be moderation over the next couple of quarters. I do not think that a 25 basis point change in interest rates one way or the other will have much effect on the housing market at this point, and I do not believe that we should stand in the way of the adjustment to the housing sector to move to a more sustainable level of activity.

Thus far the Committee has maintained its credibility, and long-run inflation expectations have been stable. That is very good. My concern, however, is that the longer we tolerate inflation above our comfort zone, the more risk we have that those expectations will become unhinged. Their becoming unhinged, as I noted in my earlier comments, could lead to some very unpleasant outcomes, and we would find regaining our credibility very difficult. Because of the weakness in residential investment, a rise in the fed funds rate could be viewed as potentially costly; but that potential cost increases the value of the actions as a signal of the Fed's commitment and its effectiveness in keeping inflation expectations firmly in check.

As the discussions around this table in August and today show, reasonable people doing sound economic analysis can have different views about whether further policy firming will be needed. I understand and respect both sides of that argument. My goal at this point is to stress, as many people have stressed, that we shouldn't lose sight of the importance of our credibility and to state that I am unhappy with the level of core inflation and with the pace at which it seems to be declining, at least in the staff's forecast. Credibility is difficult to acquire and easy to lose. If we convince ourselves at each juncture of the decisionmaking process that at the margin we can risk sacrificing a little credibility to achieve some other loosely defined and perhaps illusive objective, we may find our capital significantly depleted. Once that is obvious in the data, it is too late.

The decision to pause in August was a close call, but the pause cannot be ignored, I think, in deciding the appropriate action for today. While I believe the language we used in our August statement gives us the flexibility to raise rates, I think doing so today would pose a very different and difficult communication challenge. I argued last time that, if the data for August and September continued to evolve as they had in June and July, it would be hard to change our policy stance if we paused in August. That seems to be exactly where we are. I might argue that another six weeks of inflation above our comfort zone has increased the risk to our credibility, but I think that initiating a rate increase so soon after pausing, given the data we have received, could be misinterpreted and pose its own risk to our credibility for sound monetary policymaking.

Thus, I come down on the side that it would be better to remain on hold for this meeting but to have strong enough language in today's statement to enable us to initiate rate increases in the near future unless the incoming data are significantly different from what we've expected. The language in alternative B+ comes close to doing that. It is important that we continue to say, as in section 4, that inflation risks remain. I would not like to cite factors restraining aggregate demand in the list of things that would potentially help moderate inflation. I do not think we can measure the tradeoffs between growth and inflation precisely enough to depend on a moderate deceleration to bring inflation down over the forecast period. Moreover, and even more important to me, such language fosters a belief among the public and others that we have a desire and an ability to engage in fairly precise fine-tuning.

I am opposed to alternative A language. First, I do not think that we can say with any great confidence that inflation risks appear to have diminished. Second, I do not think that saying "downside risks to growth have become more significant" is helpful at this point. Saying that is likely to lower the expected path of future interest rates, as has been pointed out, and to reinforce the idea that interest rates are likely to come down sooner than is built into our forecast. To the extent that the assessment-of-risk language is supposed to help with the public's understanding of the monetary policy process over the coming months, I think the language in alternative A would be counterproductive.

Finally, I would like to reiterate a point that has been made around the table several times. When we look at the longer-term survey data and at what the markets are saying, they seem to be reading the fact that we do not actually have a target zone of 1 to 2 percent. The target zone is really maybe 1 to 3 percent or 2 to 3 percent. If in fact our comfort zone is 2 to 3 percent, then we should communicate that fairly directly rather than speaking one way and acting another way. Of course, as Governor Kohn and several others mentioned, that point brings us right back to the communication issue, which I think will be a very important agenda item in the coming meeting. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. After looking closely at the new data since the last meeting, I do not see a compelling reason to materially alter my assessment of policy. I still think that the fed funds rate should be 5½ percent to bring core inflation down rapidly enough. My preference is based on an assumption that we want to bring core inflation down to 1½. That is how I think things through when I come into these meetings—I have not been told to do otherwise—and, without a firmer policy path, I think that core inflation is likely to decline no more rapidly than the glacial pace of the Greenbook.

I acknowledge that there are risks to real growth in the outlook and that raising rates may add to those risks. But the risks strike me as tolerably small partly because my baseline forecast stays a little further away than the Greenbook from your point-of-no-return thresholds, which I think are legitimate concerns. But since you have put that on the table and President Poole has echoed this, let me add to his statement that tolerating a rise in inflation to avoid a point of no return and recession is, I think, a grave error, and I think that the experience of the ’70s is strong evidence of that. Besides that, I think these risks can be significantly lowered to the extent that tighter policy shifts the public’s expectations regarding our future conduct. A lot of comments around the table just now have indicated that the public has substantial uncertainty about whether 1½, 2, or 2½ percent is where we are really interested in bringing inflation to.

I am not as concerned about a rise in inflation right now. We have experienced increases in core inflation in response to energy price shocks, and I am concerned about the possible effects on core inflation from the next round of fluctuations in the oil market. The process is repeatable, and just like the inflation dynamics that the Greenbook staff analyzed, the response to energy price shocks is a reduced form, and it embodies what people expect about how we are going to react to those shocks. I think the major danger is that we allow core inflation to persist above 2¼ percent for a substantial time. The longer we allow that, the more likely it is that the public’s expectations will collapse around a high rate of inflation and the harder it will be to bring core inflation down to 1½ percent, if that is what we settle on wanting to do.

CHAIRMAN BERNANKE. Thank you. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. As I noted earlier, given the relatively subdued pace of incoming data, given the range of uncertainties that have been talked about, and given that we have already paused, I would continue to pause. I thought the exposition you gave about the point of no return was close to my own thinking, without my quantifying it in that effective fashion. There are downside risks, and I do take seriously the Greenbook’s forecast of slow growth. However, if we do continue our pause, we need to continue being fairly strong in the way we communicate. Now, I have gone back and forth about how exactly to do that. I am a bit attracted to Michael Moskow’s formulation of being essentially in the area of B+ but having the statement look like B—that's the way I interpret it—but also having the minutes emphasize the concern that I sense around the table about inflation risks going forward.

I, too, was a bit disappointed in the market reaction partly to our statement but mostly to the minutes of last time. Perhaps the market was overly influenced by the incoming data at the time the minutes were released, but it did seem to think that we thought the risks of rising inflation had moderated considerably. I don't think that's a general view of the Committee. I take seriously the concerns that many have raised about our continued seeming complacency about the level of price escalation over a fairly long period—four or five years or so—unless our preference is for inflation that centers on 2 or 2½ percent rather than on 1½ percent. Personally, I don't see anything wrong with 2 or 2½, and I do not know whether we have any compelling data that suggest that a lower range is obviously preferable. I remember the days in which we had inflation at a little above 1 percent, and we were really concerned about deflation. So I think a lot of ins and outs and ups and downs here are getting kind of confused.

In that regard, I never thought I would be looking forward to yet another discussion of inflation targeting. [Laughter] I think that the tension between the comments of many people regarding a comfort zone of 1 to 2 percent and the expected slow moderation of inflation that is implicitly embedded in our public comments and in our public forecasts over the next couple of years is becoming more evident to market analysts along the lines of what several people have mentioned. There probably is a need for more clarity here, and so I guess I am looking forward to it. [Laughter]

CHAIRMAN BERNANKE. Thank you. I assure you that the minutes will reflect the tenor of the meeting. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. It is still too early to know whether our current policy stance will succeed in lowering inflation to an acceptable level over time, but the data since our last meeting reassured me that our decision to step off the escalator was wise, and I think we should remain on the sidelines today. Recent inflation readings have contained no adverse surprises. Inflation expectations remain contained. I think the inflation outlook is slightly improved because of the reduction in energy and commodity prices, and growth during the second half of the year now appears quite likely to fall short of trend. I view the risks to the attainment of our objectives as more balanced than they were in August, and I certainly judge the downside risks to growth to have increased. Your discussion of nonlinearities, Mr. Chairman, was interesting, and it is important to be sensitive to that possibility. That said, I think that the upside risks to inflation still outweigh the downside risks to growth. With inflation projected to remain uncomfortably high over a sustained period and with the economy still likely operating beyond potential, I favor alternative B and think it's important that we do at least hint at an upward bias for fed funds rate changes.

With respect to the language, I prefer alternative B to alternative B+ because the latter points to a greater possibility of a near-term tightening. I am concerned, however, that markets appear to think that the fed funds rate has peaked and that cuts seem very likely by next spring. I do not think alternative B would shake that view in the market. In contrast, I find myself more in agreement with the Greenbook baseline for the fed funds rate, suggesting that we're likely to want to hold it near its present level for some time to bring inflation down. Now, markets obviously may turn out to be right. But if, as the months go by, developments raise our confidence in the Greenbook baseline view, then I think it would be useful for us to think about ways to signal to markets—possibly through some forward-looking language—an extended policy path in somewhat clearer terms than any of the options in table 1 currently allow.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. From a prudent risk-management perspective, I think we made the appropriate decision to pause at the previous meeting, and again from a risk-management perspective, I think we should continue to pause at the moment. Certainly there are downside risks to the outlook that we have talked about. The lagged effects of the interest rate increases are still not in, and there is a lot of uncertainty with respect to the housing market.

With respect to the way the markets reacted to our statement from last time, I am somewhere between President Stern and the person formerly known as the Vice Chairman of the FOMC, Governor Kohn. [Laughter] I think that the markets reacted broadly reasonably in terms of the level of expectations to what we had said, but I find it a bit hard to understand their apparent thinking that there is little uncertainty about where we are going or where the economy is going. So I am somewhere between those two. Certainly I have had people say, as many people around the table have heard people say, "Where exactly is your comfort zone on inflation? Is it moving up?" But if you look at the surveys, you do not see that; and if you look at the TIPS spreads and other places where people are putting their money where their mouth is, you're not really seeing that. So I am not quite sure how to weigh those reactions. Obviously I do not want inflation expectations to become unhinged: That would be very, very costly, and certainly there is a nonlinearity in trying to put the hinge back when the hinge has come off. But the situation we are in is very different from that. Even though I think that we need to convey to the markets our concerns about inflation risks, I would not favor alternative B+ because it takes away some of our flexibility going forward and also suggests more certainty about what we will do next. There was a lot of uncertainty around the table, and our concern that the markets are thinking that we are too certain might push us in the other direction.

However, I would like to put on the table a suggestion for a change. In alternative B, section 3, we have added the phrase "on balance" in the first sentence: "Readings on core inflation have been elevated on balance." The innovation of the two words "on balance" is perfectly reasonable because, as the Chairman said, the data on inflation since the last meeting have probably been slightly on the lower side of expectations rather than on the higher side and many of the three-month measures of inflation peaked earlier. But I am a bit concerned that, with just the small amount of data that we have seen recently, by saying "on balance" we are making the qualification that it is only on balance and that we are not so concerned about the elevated levels. I think this also reflects some of the concerns of the people around the table. So I put out for discussion that we consider deleting "on balance" because, from my prudent risk-management perspective, I think we shouldn't be making a particular commitment about that at the moment.

I would object to the B+ language; I think it takes away some of our flexibility, which is not a prudent thing to do at this time. On the point that was raised about the difference between the first sentence and the subsequent sentence in the discussion of energy, I think the energy discussion clearly relates to headline inflation and that there certainly is some effect of energy prices on headline inflation. I do not think it is inappropriate to acknowledge that at that place.

CHAIRMAN BERNANKE. Thank you. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. First, I support no change today. I do not believe there has been enough information to change my mind from the last meeting. I support alternative B because I am concerned that B+ is more of a commitment that we are going to do something, and I am not ready to go that far. However, I agree with President Minehan's comments that the long-term inflation level above 2 percent, especially now that we have 2008 in the forecast, is worrisome because of where we are with resource utilization and potential growth and the potential conflict that I see there. I also remember that I was very nervous when inflation was dropping. It was below 1 percent. Going between the short-run spikes down and short-run spikes up gets one nervous. So not only do we need to think about the range, but also we need to think about what we mean by the medium term in which to gauge it. I look forward to this discussion because it may help me put those thoughts together at the next meeting. But for today's meeting, I favor alternative B as it is and no change in rates.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Given our decision at the last meeting, I favor maintaining the pause today, and I favor alternative B. The judgment to pause, as well as the language around that, does in fact constrain our flexibility, and I think most of us recognized that going into our last meeting.

In reviewing the language, I think that B+ has some superficial appeal, but the appeal really is in understanding that's what we meant to say or that's how we meant the markets to react last time. That is, I do not think our statement today should redo, correct, or try to reinterpret the last one. We had one shot in August. We now have a shot in September. Some of the appeal of B+ is trying to drive those market reactions that we expected. Given what the market has done, it strikes me that changing the language about what we said last time carries a large burden. The language in the statement represents a relatively blunt instrument, and our view that it is somehow nuanced or that we can play nuances through it is hard to prove in the marketplace. I read alternative B as somewhat less hawkish than our August statement, and I would strongly support Governor Kroszner's recommendation to strike "on balance" because, again, I do not want to overly encourage the market behavior that we have seen over the intermeeting period. So with that I recommend alternative B with the striking of "on balance."

CHAIRMAN BERNANKE. Governor Mishkin.

MR. MISHKIN. Well, in contrast to some people here, actually I'm quite comfortable with the Greenbook forecast as to the most likely path of inflation. I am more troubled about what is further out beyond the policy horizon. I think that the most likely path of inflation is to hit 2½ percent on the CPI and stay there, which is correspondingly around 2 percent on the PCE deflator. So I do have some discomfort there, but I do not think that pursuing something like B+ or raising rates at this time is the right way to deal with this problem. How we manage expectations really is an issue, and we can't do it with the apparatus we have now. I am very much looking forward to the discussion of communications at the next meeting [laughter] because I think the issue here is our overall strategy about monetary policy. We have to think about how we put it all together in terms of what we do at a particular meeting and in terms of how we manage expectations going forward.

So at this particular juncture I am very comfortable with B. I think that the right way to express the fact that we are uncomfortable with the current rate of inflation and with what will happen more than two years out is to do it through the minutes. I am sure the minutes will show that the sentiment of the Committee is that we're not comfortable with having a situation in which, if inflation does not moderate along the lines of the Greenbook, we keep rates the same. In that context, we would likely have to raise them; or if the economy weakens somewhat and inflation does not decline the way we hope it will, we might actually have to maintain rates at the current level longer than the market might otherwise expect. So we can do it that way at this stage, and we'll just have to see where the Committee comes out in thinking about how we manage expectations in the future. Thank you.

CHAIRMAN BERNANKE. Thank you. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. I was fairly comfortable with our decision in August, and I am fairly comfortable with that decision in retrospect. Whether we were wise or we have been lucky is something only history will judge. I would be more comfortable if there were a slightly positive slope to expectations about the future path of policy and less certainty around that path, but I don't know how to achieve that responsibly with language today. As Governor Kohn said, despite whatever discomfort one may have with that path in markets today, we can't say that path is fundamentally getting in the way of our confidence or the world's confidence in our capacity to achieve our objectives. So I'm comfortable with not moving today and basically fine with the language in alternative B.

I have just two other observations to make. It is striking that we have an asymmetry in the growth paragraph and in the inflation paragraph in that we have slipped into giving a forward-looking view about the likely path of inflation in a qualitative sense but have not done so in the growth paragraph for lots of reasons. I think that the asymmetry creates a bit of a problem for us today in trying to explain how we view the outlook and the risks to the outlook. The absence of any language about the future path of growth makes me more uncomfortable than I felt about the path today, and so I think we should come back and think about whether we want to correct that. Correcting that asymmetry might help a bit in explaining to the world any difference between the staff forecast, which will be clearly reflected in the minutes, and the implicit forecast of the Committee.

My second point is just about the minutes. I think that there is an issue regarding the minutes in that the staff forecast gets expressed with a clarity that is not expressed about the Committee forecast. The Committee forecast is necessarily described more vaguely: It's harder to find what the center of gravity is, and even the tails don't necessarily come through. We probably saw the reaction we did to the minutes last time because, even when the Committee's judgment is much different from the staff's, that difference is hard to characterize in the minutes. That is another topic for future discussion. Thank you.

CHAIRMAN BERNANKE. Thank you all. Our pause at the last meeting was a benefit-cost calculation. The benefit of pausing was to give ourselves more time to assess the state of the economy and the effects of our previous interest rate actions. The potential cost of pausing was that we would lose some credibility, that inflation might move adversely, and we would get behind the curve in terms of that very important goal. The intermeeting developments have shown a somewhat weaker economy in real terms than we had expected and, I think I can safely say, no reduction in uncertainty. Although inflation remains above where we would like it to be, I think we can't say that the inflation situation has deteriorated during the intermeeting period. Therefore, it's reasonable for us to continue to pause to get more information and to evaluate the state of the economy. We can, of course, maintain our policy stance at this level for a while if we deem it sufficiently restrictive, or we can move it as new information comes in. At this point we will have a very high degree of flexibility in future actions.

I'd like to make a few other comments about some of the conversation around the table. I'm bemused by the de facto inflation targeters that we have become here [laughter] with the 1.5 percent goal. Let me just make a couple of comments on that. First, flexible inflation targeting does respond to things other than the target itself. In particular, we saw a surprising increase in inflation earlier this year, which took us above or further above our implicit target. The optimal response to that is to return to target, but only slowly and with the amount of time to take to get back to the target depending positively on the initial deviation. Second, the speed at which you return to the target ought to depend on the state of the real economy. The extent to which we're concerned about potential recessionary effects should make us be a little more cautious and make us move a little more slowly. I would add that, although a number of us, including myself, have mentioned this 1 to 2 percent zone, it has also been noted around this table that it may not, in fact, be the right zone. If we do determine that we want to announce a target and it is 1.5 percent, we should lay out a plan for getting to that level over a period of time and not immediately. But we might choose as an alternative possibility, for example, 1½ to 2 percent, in which case we would be somewhat closer to that target in a shorter time.

Let me also say a word about credibility, which is a little subtle, and I am probably going to mess it up. I think there are two definitions of credibility. The first is the one we are all familiar with, which Paul Volcker gave to the Federal Reserve and for which he is one of my personal heroes. That is the kind of credibility that involves doing what you have to do to get inflation where it needs to be. Let me be completely clear that, if inflation conditions begin to deteriorate and our credibility comes under serious threat, I certainly will support doing whatever it is we have to do to maintain that credibility. There is another kind of credibility, however, which I think was brought to the Federal Reserve by Alan Greenspan, which is credibility and confidence in our ability to analyze and forecast the economy sufficiently well that we can achieve our objectives in a way that does not induce undue harm to the economy. I think that the Greenbook forecast, if it comes true, would in fact be a quite positive accomplishment for this Committee because it would have us bringing inflation down to a reasonable level in a moderate way and avoiding a recession. That outcome would actually be very good. In fact, our task is going to be more difficult than that, as I've indicated. Part of our task going forward is not just to show that we're committed to fighting inflation, which we are, but also that we are very deftly evaluating the state of the economy and making good judgments about what needs to be done.

Let me turn to the statement. I would like to discuss certain elements of it. I'd like to propose that we use alternative B, and let me note a few points. First, I'm sure that everyone noted that in section 2, in the phrase "reflecting a cooling of the housing market," we are eliminating the word "gradual" and doing so indicates a somewhat stronger degree of cooling. Second, in response to President Poole, I think this is not intended to be anything other than a pure description of the economy and our sense of what is happening in the economy. It actually does have a bit of a forward-looking aspect as well, Vice Chairman Geithner; and it is factual in that, if you look at the forecast, the slowdown in construction accounts for almost all the decline from potential. So I don't think it's in any way focusing our policy decision on the housing sector.

In section 3, the addition of "reduced impetus from energy prices" is useful, I think. We have been criticized for, among other things, being too sanguine about the disinflation and arguing implicitly that a modest amount of slowing in the economy would be sufficient to achieve disinflation. We do not actually believe that, and one of the reasons we forecasted a decline in inflation is that we expected to see a reduced impetus from energy prices going forward. We now have actually seen the fall in energy prices, and so we don't even have to appeal, for example, to the futures market. We can simply state that we have seen this decline in energy prices, and I think that makes our story a little more complete and makes it look more understandable to the public about why we think that inflation should decline slowly over time.

I propose to keep the assessment of risk as it stands. It's very clear that our bias is toward resisting inflation. I'm not even sure that B+ would actually be a more hawkish phrase because it admits the possibility of easing, whereas this statement actually suggests that it's unlikely that our next move will be anything other than upward. I am torn about the phrase "on balance." The intention of the phrase was to note the slightly better readings but to emphasize that the overriding view is that inflation readings are still elevated. However, several people have suggested taking it out, and I am willing to do so. Are there others who have a strong view one way or the other?

MR. MOSKOW. I would agree with taking it out. It's a good suggestion because, when you change the language from the last time, people focus on that, and putting it in will overemphasize the importance of it.

CHAIRMAN BERNANKE. I get a sense of nodding around the table, so let's strike the words "on balance" from section 3. "In part" was changed back to "partly" just to be the same as last time. We consulted with the style editor, and she assured us that there was no substantive difference between those two. [Laughter] So my recommendation then is no action today, and alternative B in the statement is amended by eliminating the phrase "on balance." May I have your reactions? All right. If there is no further comment, then please call the roll.

MS. DANKER. I will be reading the language from page 25 of the Bluebook directive first.

"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 the risk assessment: "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
President Guynn	Yes
Governor Kohn	Yes
Governor Kroszner	Yes

President Lacker	No
Governor Mishkin	Yes
President Pianalto	Yes
Governor Warsh	Yes
President Yellen	Yes

CHAIRMAN BERNANKE. Thank you very much. Our next meeting is a two-day meeting, and we will have the long-anticipated discussion of inflation targeting [laughter] on October 24 and 25. The meeting is adjourned.

END OF MEETING