

**Meeting of the Federal Open Market Committee on  
December 13, 2005**

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., at 9:00 a.m. on Tuesday, December 13, 2005. Those present were the following:

Mr. Greenspan, Chairman  
Mr. Geithner, Vice Chairman  
Ms. Bies  
Mr. Ferguson  
Mr. Fisher  
Mr. Kohn  
Mr. Moskow  
Mr. Olson  
Mr. Santomero  
Mr. Stern

Ms. Cumming, Messrs. Guynn and Lacker, Ms. Pianalto and Yellen, Alternate Members of the Federal Open Market Committee

Mr. Hoenig, Ms. Minehan, and Mr. Poole, Presidents of the Federal Reserve Banks of Kansas City, Boston, and St. Louis, respectively

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

Messrs. Connors, Freeman, and Madigan, Ms. Mester, Messrs. Oliner, Rosenblum, Tracy, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

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

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

Messrs. English and Sheets, Assistant Directors, Divisions of Monetary Affairs and International Finance, respectively, Board of Governors

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

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

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

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

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

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

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

Messrs. Fuhrer, Hakkio, Rasche, Sniderman, Weinberg, and Williams, Senior Vice Presidents, Federal Reserve Banks of Boston, Kansas City, St. Louis, Cleveland, Richmond, and San Francisco, respectively

Mr. Cunningham, Ms. Mosser, and Mr. Sullivan, Vice Presidents, Federal Reserve Banks of Atlanta, New York, and Chicago, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

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CHAIRMAN GREENSPAN. Good morning, everyone. Mr. Kos, will you start us off, please?

MR. KOS.<sup>1</sup> Thank you, Mr. Chairman. I'll be referring to the handout that is in front of you. With the year-end approaching, I thought I'd look back at 2005 a bit. One of the more surprising market developments has been the steady—if low-key—appreciation of the U.S. dollar. That strength is all the more surprising after the dollar's depreciation in 2004 when it appeared that the current account imbalance had hit a threshold that was impacting exchange markets. But, as shown on the top of page 1 of your handout, the trade-weighted dollar has appreciated by 8 percent since the start of 2005. The dollar's strength was broad-based against all major currencies. As shown in the middle left panel, the dollar rallied from below 105 yen to 120 yen. That last 10 yen—from 110 to 120—came in a nearly straight line and was coincident with Prime Minister Koizumi's victory in the September elections and the ongoing improved sentiment about the Japanese economy. Risk appetite among Japanese investors seems to have risen and capital outflows have accelerated, as investors look to pick up yield in fixed income markets not only in the United States but also in markets such as the U.K., Australia, and New Zealand.

As shown in the middle right panel, the dollar has also risen against the euro. At the start of 2005 the euro was trading at about \$1.35. Today it is below \$1.20. Sentiment toward the euro has been poor, given lackluster growth and the widening interest rate differentials with the dollar—but I'll comment more on that later. Among the few currencies that the dollar depreciated against were the Mexican peso and the Brazilian *real*. Both countries have substantially higher nominal and real interest rates, and both central banks in recent months have been easing policy.

At this point, you might be asking yourself: Whatever happened to the issue of the current account deficit? Weren't the imbalances supposed to lead to a weaker dollar? Certainly, that explanation appeared to work last year when the dollar was falling. The bottom panel of the first page graphs the trade-weighted dollar—the red line—and the current account balance for the United States as a percent of GDP since 1980—the blue bars. Ideally, this should show that when the deficit is high, a weak dollar follows. While there have been a couple of periods when growing current account imbalances were followed by a subsequent bout of dollar weakness (for example, in the period after 1985), there are examples of just the opposite as well. The dollar strengthened in the early 1980s and also the late 1990s in the face of high and rising current account deficits. When looked at quantitatively, the correlation between the current account and the next year's exchange rate is weak.

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

What, then, explains the dollar's strength? The most compelling explanation—and this is tentative, I should say—appears to center around the economy's strength relative to other major economies. That difference in performance is, in turn, reflected in interest rate differentials, as shown on page 2. This page graphs the sovereign G-7 yield curve in green, the U.S. Treasury curve in blue, and the G-7 curve excluding the United States in red. The composite yield curves are based on GDP weights for each country. At the beginning of 2004, U.S. short-term rates were lower than those of other major countries and the U.S. curve was steeper. By the beginning of 2005, and with the tightening cycle here already well along, the entire U.S. yield curve had shifted above the others, as shown in the middle panel. That interest rate differential continued to widen during 2005, with the prospect for further widening if futures markets in the G-7 are to be believed.

Of course, all that tells us nothing about the future course of exchange rates. Perhaps growth and interest rate differentials will continue to drive exchange markets. Or perhaps the current account will finally hit some threshold where a sharp depreciation is triggered. Unfortunately, reviewing past relationships does not help answer that key question.

Turning to page 3 for a closer look at recent monetary policy expectations in the G-3, the top panel graphs the 3-month cash rate for the dollar and euro—in the solid blue and red lines, respectively—and 3-, 6-, and 9-month forward rates in the dashed lines. This graph depicts the widening of differentials between dollar and euro interest rates during the year. But it also shows the recent uptrend in rates in the euro area, as the ECB finally tightened by 25 basis points earlier this month—although that uptrend was contained by the ECB's deliberate attempts to signal that this was not the first of a string of moves along the lines of the U.S. cycle.

Short-term rates from forward-rate agreements for Japan, shown in the middle panel, suggest some backing off from earlier expectations about how quickly the Bank of Japan [BOJ] would enter a new tightening cycle, with 9-month forward rates falling about 10 basis points over the intermeeting period. Although the BOJ has signaled an intention to exit its quantitative easing policy in the second quarter of 2006, there has been substantial push-back from politicians. Furthermore, the BOJ itself has said explicitly that even after the exit from quantitative targeting, short-term rates would stay at or close to zero for some time afterward.

Despite actual or expected further tightening of monetary policies in many countries, risk appetite remains robust. As shown at the bottom of page 3, stock markets have rallied in most regions. In fact, in local currency terms, the S&P has been the laggard. However, when converted into dollars, the returns on foreign markets are reduced, given the strength of the dollar; and after that adjustment, the S&P's performance looks a lot more like stock market performance elsewhere in the industrialized world. Emerging-market equity markets have been booming in local

currency terms. And for specific markets such as Brazil and Mexico—whose currencies have appreciated—returns expressed in dollars have been turbocharged.

Turning to page 4 and continuing on the theme of healthy risk appetites, the top panel graphs the high yield and EMBI+ [Emerging Market Bond Index Plus] spreads for the year to date. High yield spreads have stabilized at around 380 basis points—higher than levels observed last spring but still low by historical standards. In contrast, since the last FOMC meeting, emerging-market debt spreads—the green line—have continued to tighten to all-time lows.

Investment grade spreads—in the middle left panel—show a similar pattern. Excluding the troubled auto and airline industries, corporate financial health remains strong. Earnings and cash levels are both high, and leverage is relatively low. That said, a bit of re-leveraging is in the pipeline, judging by the increasing flows in LBO deals and announced stock buybacks.

The big credit story in November, of course, was the worsened outlook for GM. CDS [credit default swap] spreads for GM, shown in the middle right panel, are now trading about 1200 basis points over Libor, compared to just over 300 basis points for the high yield CDX index. Near-term prospects for GM have deteriorated significantly, so much so that the credit yield curve for GM has inverted. In other words, it is more expensive to buy credit protection against a GM default in the next 12 months, than it is to buy credit protection against a GM default over the next 5 years. In addition, sellers of CDS protection on GM have started to demand up-front payment from buyers of protection. They are “front loading” their coupon payments of the swap because of fears that GM will default before they have received any payments from protection buyers. The worries about GM were likely reinforced by yesterday’s announcement from Standard and Poor’s that it had downgraded GM to single B.

Recent declines in volatility in both equity and debt markets reinforce this low risk concept and are consistent with the strong risk appetite in markets. While the VIX has shown some periodic spikes this year, the movements this year are very small compared to historical changes. Fixed income volatility is also low, as shown in the bottom right panel.

Turning to page 5, let me say a few words about the System Open Market Account [SOMA]. The top panel graphs the growth of SOMA in dollar terms for each year since 1995. So far, SOMA has expanded by a bit more than \$25 billion in 2005—somewhat less than the growth in recent years. The main driver of SOMA’s growth is growth of currency in circulation. As shown in the middle panel, currency growth—again, measured in dollars—has been trailing off in recent years and is likely to have its weakest year of growth since the late 1990s. We don’t know the cause of that falling growth rate, although greater use of credit cards, debit cards, and other forms of electronic payment may at least partly explain this development.

Looking at shorter periods, the bottom left panel graphs for 2005 the year-on-year growth rate for currency. Currency growth has decelerated from a 5.5 percent growth rate at the beginning of the year to about 3.5 percent. The noisy panel on the bottom right shows the growth of currency in the year-end period for each of the past four years as well as this year through last week, with projections for the remainder of this year in the burgundy dots. During the 2001 year-end—the blue line at the top—currency grew about 4 percent from November to the peak in late December before the reflows began. The following year the year-end seasonal bulge was less pronounced, and that pattern has continued in each year since. Again, it's not clear what is driving this process, but greater use of alternative forms of payment sounds reasonable. In any case, the smaller hump in seasonal demand will, if it persists, make the management of reserves more straightforward in the future.

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

CHAIRMAN GREENSPAN. With respect to your yield curves on page 2, implicit there are three observations from which you could presumably get what you're trying to get at, namely, some form of weighted interest rate differential for the three observations. These do move the exchange rate. What happens if you take this back in time? Is there any explanatory power in this relationship?

MR. KOS. I didn't look at it that closely. I suspect that if one looks at the relationship over a long enough period, probably not a whole lot. That's a suspicion.

CHAIRMAN GREENSPAN. I thought we found approximately zero.

MS. JOHNSON. This is a longstanding paradox in international economics. When you run uncovered interest parity and embody the forward rate as the expected future spot rate, you actually get the coefficient with the wrong sign in those regressions if the time series is long enough. And you never get it to confirm interest rate differentials related to exchange rates only in the positive direction and with the magnitude that you expected. There are all sorts of reasons for that. My short one is that you're running two endogenous variables on each other and, therefore, the regression doesn't make any sense, and so the results don't make any sense.

CHAIRMAN GREENSPAN. Well, this is a very interesting chart, and I like the colors. But what does it tell us? [Laughter]

MS. JOHNSON. Well, there are times when interest rate differentials seem to be the right story, and this is one of them.

CHAIRMAN GREENSPAN. I do suspect that the price of pork bellies on occasion— [Laughter]

MS. JOHNSON. In defense of this chart, let's just say that there are also theoretical reasons why at times there is this relationship.

CHAIRMAN GREENSPAN. Then there's a question of whether the theory has any fact behind it.

VICE CHAIRMAN GEITHNER. We need to believe in something! [Laughter]

CHAIRMAN GREENSPAN. Anyway, let me move on to my second question. You mentioned with regard to the performance of equity markets that on the bottom of page 3, if you took the S&P exchange-rate-adjusted, it would look more like the rest. But you already do that when you're showing everything in U.S. dollar terms.

MR. KOS. That was my point. I'm sorry, I was not clear. My point was that the S&P looks as if it underperformed the others, but when you look at it in common terms against the dollar, the S&P doesn't quite look like the laggard that it does in local currency terms.

CHAIRMAN GREENSPAN. Okay. President Poole.

MR. POOLE. You commented on currency growth slowing down as a consequence of domestic issues, but is it still true that about half of our currency is held abroad? Probably a lot of it circulates in places like Russia that have been unstable. So, one explanation could be that there's a

growing stability in some of these areas that have been heavy users of dollars and that some of this currency may be flowing back. That's just a guess.

MR. KOS. Yes, that's a good point, and we've had that discussion here in the past. In fact, the estimates are that two-thirds of the currency is overseas.

MR. POOLE. Two-thirds? Okay.

MR. KOS. We have good data on shipments. The shipments data say that the currency is coming back. What we don't know is how much is going out by other means, whether legal or illegal, through things like remittances, for example. If one looks at the other indicator that is used, which is the number of \$100 bills issued, and makes some assumptions about how many of those go overseas, then that reflow from overseas is tamed. It's damped a bit.

So I think there's some truth to what you say, but it's hard to quantify. And in any case, the interesting thing about this bottom right chart, at least, is that it's probably driven mostly by domestic factors because there is evidence of the domestic holiday fluctuation.

MR. POOLE. In terms of the seasonal?

MR. KOS. In terms of the seasonal, yes.

MR. MADIGAN. I might add, President Poole, that we do make estimates of the growth rate of the domestic component as well as the growth rate of the foreign component. According to our estimates, the deceleration over the past several years has occurred in both components. But we estimate that growth for the domestic component would be about flat or slightly negative for this year for the first time in many years—maybe ever—whereas the foreign component, according to our estimates, has slowed from growth rates of around 9 percent earlier around the turn of the decade to a little less than 6 percent recently. Of course, these estimates have to be taken with a big grain of salt for the reason Dino indicated.

CHAIRMAN GREENSPAN. Further questions? If not, Vice Chair, would you kindly make the appropriate motion?

VICE CHAIRMAN GEITHNER. So moved.

CHAIRMAN GREENSPAN. Without objection, the transactions of the Desk are approved.

Mr. Stockton.

MR. STOCKTON. Thank you, Mr. Chairman. In the spirit of the season, I am tempted to report that I bring you great tidings of comfort and joy. However, this is, after all, the Federal Reserve, so it is probably more appropriate to simply note that tidings have improved modestly over the intermeeting period. While not quite in the miracle category, we have raised our projection for the growth of real GDP over the next two years and lowered our projection of price inflation.

As you know, we revised up our estimate of the growth in real GDP in the third quarter by more than a percentage point and left fourth-quarter growth unchanged. As a consequence, real output is now projected to expand at an annual rate of nearly 4 percent in the second half of this year—about ½ percentage point faster than we were forecasting in October. The surprising strength in recent months has been widespread. But clearly, one of the standout areas of strength has been consumer spending. To be sure, sales of light motor vehicles were a bit softer than we had expected, but that was more than offset by considerably stronger consumer outlays in other areas.

This morning's retail sales report for November provided further evidence of the underlying strength in consumption. Although spending in the retail control category, which excludes sales at auto dealers and building supply stores, dropped 0.6 percent last month, that decline was more than accounted for by lower gasoline prices. In real terms, we estimate that spending was up more than 1 percent for the month. That figure is somewhat stronger than we had expected and would likely cause us to revise up the growth of consumption nearly ½ percentage point at an annual rate in the fourth quarter.

Business spending also has been strong of late. We are now projecting that growth in real spending on equipment and software will average 6½ percent at an annual rate in the second half of this year, an upward revision of nearly 3 percentage points from the October forecast. The surprise was concentrated in capital spending outside the transportation and tech sectors, where the incoming data on orders and shipments of capital goods suggest that the earlier lull in spending has ended. After being about flat in the first half, we are projecting real outlays in this category to rise 5 percent at an annual rate in the second half of this year. As you know, we had been puzzled by that earlier weakness and had been anticipating a recovery of spending in this category. In the event, that recovery has occurred a bit earlier and with more force than we had reckoned six weeks ago.

In light of the 1 percentage point upward revision that we made to real GDP growth in third quarter, it may appear a bit surprising that we only carried the higher level, and not a higher growth rate, into the fourth quarter. But part of our upward surprise in the third quarter was in non-auto inventory investment. With stocks appearing reasonably well aligned with sales in most sectors, we didn't see the need to make any further upward adjustment to this aspect of the forecast. Moreover, some of the third-quarter strength in GDP reflected defense spending that seemed likely to have been pulled forward from the fourth quarter. Both of these judgments appear to have been supported, and then some, by incoming data in the past two days. Yesterday's Monthly Treasury Statement and this morning's reading on retail inventories suggest that both defense spending and inventory investment are likely to be even weaker in the fourth quarter than we had written down. Balancing these softer readings against the stronger retail sales data would leave our forecast for real GDP growth in the fourth quarter unchanged at about 3½ percent.

In contemplating the forecast for 2006 and 2007, we had to make some assessment of the sources of the strength in activity in the second half of this year. As we had anticipated would be the case back in September, we are now in the position of having to interpret whether the errors in our forecast of aggregate activity reflect misestimates on our part of either the hurricane effects or of the underlying behavior of the economy.

We do believe that some of the surprising strength of activity is probably attributable to smaller negative effects from hurricanes than we had previously penciled in. To be sure, production in the energy sector is coming back a bit more slowly than we had expected, especially production from the off-shore platforms in the Gulf of Mexico. But outside of energy, production appears to be recovering more quickly. Output of chemicals, paper, rubber and plastics, and some areas of food processing improved noticeably in October and November. And we look to be getting a bigger plus from the production of construction supplies. On the spending side, the hits to consumption of housing services, food, and gasoline—areas that we had thought would be affected by hurricane-related disruptions—appear to have been smaller over the past few months than we had incorporated in our previous couple of forecasts. Of course, most of this remains educated guesswork and needs to be taken with a grain of salt. But all in all, we are inclined to attribute a few tenths of the surprising strength in second-half growth to smaller hurricane effects.

We have interpreted the remainder of the surprise as suggesting that underlying aggregate demand has been stronger at prevailing interest rates than we had previously projected and that, all else equal, some of this strength will carry forward into next year. Spending receives a further boost in the projection from the upward revisions that we made to stock market and housing wealth, which totaled about \$1 trillion over the forecast period. All in all, it's a stronger demand picture than we were envisioning at the time of the last meeting.

However, the information that we have received over the past six weeks has not been confined solely to aggregate demand. Developments on the supply-side of the economy also appear to have been more favorable than we had expected. The surge in output growth last quarter was accomplished with almost no increase in hours worked. Consequently, output per hour in the nonfarm business sector rose at a 4½ percent annual rate in the third quarter and is now estimated to have been up more than 3 percent over the past four quarters. As optimistic as we have been, the data have continued to outflank us on the upside in recent quarters.

In response to this continued good news, we revised up our estimates of structural labor productivity. In addition to an upward adjustment to the level this year, we boosted the growth of structural labor productivity about ¼ percentage point to a bit above 3 percent in both 2006 and 2007. Capital deepening is making a slightly larger contribution to this estimate, but most of the upward revision has occurred in multifactor productivity. Despite being nearly a decade into this favorable productivity wave, there are few signs that the efforts or abilities of businesses to implement greater technical and organizational efficiencies are flagging.

On balance, the revisions that we made to aggregate demand were a touch larger than those we made to aggregate supply, and we estimate the output gap to be slightly narrower, on average, over the next two years than in the previous forecast. In response to these developments, we raised our path for the funds rate another 25 basis points, to 4½ percent by early next year.

Despite these modest adjustments, the basic contour of our forecast remains unchanged. After increasing 3¾ percent this year, the rise in real GDP slows to 3½ percent in 2006 and 3 percent in 2007. That pattern reflects several powerful crosscurrents. We expect activity to be boosted early next year by rebuilding efforts in the Gulf Coast region. Moreover, with energy prices projected to level out after increasing sharply over the past two years, the drag on aggregate demand from the earlier run-up in prices should begin to ebb. But these positives are more than offset by fading fiscal stimulus, the lagged effects of tighter monetary policy, and a gradually diminishing impetus to consumer spending from equity and housing wealth.

In sorting through the details of our forecast, it should be pretty obvious that a flattening out of activity in the housing sector is one of the principal sources of slower aggregate growth. After contributing about ½ percentage point to growth in real GDP per annum over the past four years, we are projecting residential investment to be a roughly neutral factor over the next two years. But that is still all forecast. To date, the hard data on housing have remained solid. Housing starts have remained at elevated levels, new home sales hit a record high in October, and house prices as measured by the OFHEO purchase index continued to increase at a double-digit pace through the third quarter.

That said, reports of cooling in the housing markets seem to me to be more frequent and more widespread than was the case six months ago. As we noted in yesterday's

Board briefing, a variety of indicators of housing activity have turned down in recent months. Household attitudes toward home buying have dropped sharply; builder ratings of new home sales have deteriorated; the index of mortgage applications for home purchase has fallen off; and the inventory of unsold homes has moved up. Taken in isolation, none of these measures has an especially reliable statistical relationship to housing activity. But taken together, they could be indicating that we are at the front edge of some cooling in these markets.

I offer one more piece of evidence that I think almost surely suggests that the end is near in this sector. While channel surfing the other night, to the annoyance of my otherwise very patient wife, I came across a new television series on the Discovery Channel entitled "Flip That House." [Laughter] As far as I could tell, the gist of the show was that with some spackling, a few strategically placed azaleas, and access to a bank, you too could tap into the great real estate wealth machine. It was enough to put even the most ardent believer in market efficiency into existential crisis. [Laughter]

Only time will tell if these indicators are giving us a head fake or are the start of our long-awaited slowdown in this sector. For now, we are sticking with our call that housing activity will level off next year. Moreover, we continue to anticipate that a more visible deceleration in house prices will be in evidence by the middle of next year, and the associated slower growth of household net worth contributes to the projected up-tilt in the personal saving rate. In our view, both of these developments are critical for damping growth by enough to prevent the economy from overheating.

To date, the news on inflation does not suggest that we have overshot the mark on potential, though our ability to make that assertion with any confidence in real time is admittedly very tenuous. To begin, measures of core consumer prices came in a bit below our expectations. We also had a faster unwinding of the earlier hurricane-related increase in retail energy prices. Survey measures of inflation expectations have retraced virtually all of this autumn's run-up, and TIPS [Treasury inflation-protected securities] -based measures of inflation compensation have retreated as well. On the cost side, lower hourly compensation and faster growth in structural productivity imply less pressure from labor costs, and the markup of prices over unit labor costs has risen further, pointing to a somewhat larger cushion between costs and prices.

These developments led us to reduce our projection of core consumer price inflation for 2006 by  $\frac{1}{4}$  percentage point to about 2 percent and to trim our forecast for 2007 a tenth to  $1\frac{3}{4}$  percent. The contour remains much the same. We still are expecting a slight pickup in core inflation as we enter next year, reflecting the direct and indirect effects of higher energy prices this year. In that regard, the core PPI for intermediate materials increased  $1\frac{1}{4}$  percent in both September and October, with the price increases concentrated among goods that are heavily dependent on petroleum and natural gas. And higher prices for these inputs as well as higher prices for transportation services seem likely to place some mild upward pressure on core inflation in the months immediately ahead. Still, I think this forecast is best characterized as one in which inflation pressures are in the process of topping out rather than continuing to build.

Obviously, there are some very important risks on both sides of our forecasts for real activity and inflation, and we tried to highlight some of the more prominent ones in the Greenbook. I recognize that our baseline forecast, in which the economy's growth slows to about trend, output settles out at a level very close to potential, and inflation pressures ease a bit, all with just a little more tightening of policy, seems too good to be true. No doubt, events will conspire to force adjustments, both major and minor, on the staff projection. Perhaps I've just written the "flexibility and resilience" speech for the Chairman so often over the past few years that I'm suffering from something akin to the Stockholm syndrome—the tendency of hostages over time to sympathize with the views of their keepers. [Laughter] But as I look back over the past year and observe how well the economy performed in the face of some pretty substantial shocks, I don't think our optimistic outlook is unwarranted.

Karen will continue our presentation.

MS. JOHNSON. This is the time of year when folks young and old look forward to receiving a pleasant surprise or two—and not necessarily something that can fit inside a single stocking. We in the International Division have found ourselves pleasantly surprised by the strength of global economic activity during the third quarter, which is now evident in the data, and the indications that some of that strength is continuing. Accordingly, we have revised up our estimate of foreign real GDP growth for 2005 to near 3½ percent, about the pace we were projecting early last year. The baseline forecast this time calls for economic activity abroad to continue expanding at about that pace through the end of 2007.

The greater-than-expected buoyancy of the global economy was widespread and does not appear to be explained by one or two special developments that have limited implications for future growth. Among the industrial countries, the strong performers such as Canada had another good quarter, with Canadian Q3 real GDP growth at 3.6 percent. But more sluggish regions, for example the euro area, also did moderately well, at 2.6 percent real growth. Labor markets have either continued to improve or remained solid. And German and Canadian orders data portend continued solid expansion. Among the Asian emerging-market economies, China, Taiwan, Hong Kong, Korea, the ASEAN countries, and India all performed well in the third quarter. In Latin America, a sharp rebound in Mexican GDP growth raised the average for the region despite a very weak quarter in Brazil.

Some elements of recent foreign activity do raise questions about whether strength is transitory or will prove more persistent. In the United Kingdom and some smaller economies such as New Zealand, further increases in housing prices appear to be contributing to sustained or accelerating consumption. However, an end to the inflation of housing prices could trigger a sharp slowing of consumption. Euro-area growth remains dependent on export demand and lacks support from domestic consumption. And the rebound in Mexico was primarily in the agricultural sector and did not include a significant bounceback in manufacturing. These factors suggest a transitory element

in the recent data. In contrast, in the major regions of the global economy, inventories do not appear excessive and in need of reduction. Private fixed investment has shown vitality in Japan, the euro area, the United Kingdom, Canada, China, and Mexico. These elements suggest the expansion will prove durable.

In most foreign economies, financial conditions remain very favorable for growth. Equity prices, in particular, have risen substantially over the year, providing support for both private investment and consumption. Since the end of last year, equity prices have recorded double-digit increases in the foreign G-7 countries, with the more than 30 percent gain in Japan being particularly noteworthy. Among the emerging Asian countries, stock prices in Korea have surged over the year. In Latin America, Mexican and Brazilian stock prices have risen very sharply. Except for Canada, the major foreign industrial countries have all experienced expansionary depreciations of their currencies on balance over the year. For these countries, long-term interest rates remain low, ranging from about 1½ percent in Japan to 4¼ percent in the United Kingdom.

We interpret the positive surprise in the pace of third-quarter activity as indicating somewhat greater fundamental economic momentum abroad than we recognized in the previous Greenbook. That momentum, in combination with the generally supportive foreign financial conditions, should sustain foreign real GDP growth, and we have accordingly raised our forecast for 2006 slightly. We expect that this continued moderate real output growth will be accompanied by little change, on average, in inflation abroad as the flat path projected for global crude oil prices over the forecast interval should result in some shifts down in headline inflation. Of course, risks of an acceleration in consumer prices abroad, owing to second-round effects from previous oil price rises, remain. Both the Bank of Canada and the ECB raised policy rates during the intermeeting period to counter any upward drift in inflation pressures or in inflation expectations. We expect further policy tightening in Canada in the next few quarters, more limited additional action by the ECB, and an end of the Bank of Japan's policy of quantitative easing some time in 2006.

By itself, somewhat stronger activity abroad should work to narrow our external deficits in 2006 and 2007. But we have also slightly raised the forecast path for the dollar in this forecast from that in the October Greenbook, and the level of U.S. real GDP has been revised up as well. Together, these last two factors outweigh the effects of stronger activity abroad and, as a result, we expect a greater U.S. current account deficit during the next two years, with the upward revision reaching about \$50 billion at an annual rate in the fourth quarter of 2007. About \$30 billion of the increased deficit is expected to be accounted for by a wider trade deficit, with the remaining \$20 billion arising from a downward revision to net investment income. Our outlook incorporates a deterioration of more than \$100 billion in U.S. net investment income from the second quarter of this year to the final quarter of 2007, with negative net income expected for the current quarter. With the current account deficit soon to reach \$900 billion and projected to cross the \$1 trillion mark in 2007 and with net investment income significantly negative, market attention to the burden of the U.S. external

deficits could increase. This feature of the December forecast is not such a pleasant surprise. Given today's prices for energy, perhaps we would be better off with a lump of coal.

David and I would be happy to answer any questions.

CHAIRMAN GREENSPAN. This is Comedy Central! [Laughter]

I have the impression, and I don't know whether the hard data actually confirm it, that the emerging countries, adjusting for policy, politics, history, whatever, seem to be doing a good deal better than one ordinarily projects. The EMBI spread has continued to come down through all sorts of developments. We have the spectacle of the Mexicans a couple of years ago or so being able to sell for the first time a long-term peso-denominated debt instrument. Brazil just sold one denominated in its domestic currency, and Colombia did as well. The Argentinean debacle never resulted in the really awful consequences that were supposed to occur there, and industrial production is up sharply in Argentina despite all of their other problems. Venezuela should be shutting its doors by now, granted what they're doing there, but it's not doing all that badly. Is something fundamental happening that explains all of this?

MS. JOHNSON. Well, two or three things come to mind. No one of them alone would seem to explain it, but in conjunction they may be a partial answer to your question. One is that following the Asian financial crisis, and no doubt in part in response to what has been happening in the United States, particularly since say, '95 or '96, most of these countries have been running current account surpluses and acquiring international reserves. The Asian countries have been doing it to the extreme. They've been piling up reserves and protecting themselves from being dependent upon the whims of foreign investors ever since that crisis. And they're still doing it, although I noted an article in today's Wall Street Journal quoting some Chinese officials as saying that maybe they now had enough. So I took that to be an interesting sign.

The Latin American countries—for many of the same reasons, but without quite the same capacity—have nonetheless put themselves in a position of an external plus instead of a minus. Now, the Latin Americans, in particular, and some of the Asians have outstanding debts, so they have payments schedules they have to meet. It's not as if they are not in some sense still embroiled in the consequences of their histories and so forth. But their position vis-à-vis global capital flows has turned around enormously, and they have never gone back to policies that reflect an attitude of “the crisis is over, full steam ahead.” They have retained this preference for keeping themselves net lenders in a flow sense in the international capital flow. There are many reasons to view that as a problem as much as a good thing, but it explains, I think, why Argentina didn't have much contagion effect and why these countries seem to us to be doing better.

CHAIRMAN GREENSPAN. Is there considerably more exchange rate flexibility now?

MS. JOHNSON. Well, most of their exchange rates are floating, yes.

CHAIRMAN GREENSPAN. Yes, that's what I'm saying.

MS. JOHNSON. Yes. So very few are trying to peg to an overvalued exchange rate. Even a country like Malaysia gave up on its pegged exchange rate. So the floating rates have certainly improved the situation. But, you know, the peso and the *real* are strengthening vis-à-vis the dollar. So it's not mercantilist. It's not that these countries have somehow allowed their exchange rates to become and remain undervalued and that they are benefiting from that. But again, I think the flow changes the risk character of these countries and their ability to interact with international investors.

I think a second fundamental is that Asia, largely because of China but also because of India to some degree—because of the Asian Tigers, as we used to call them—has become a second independent source of vibrant global economic activity. It was derailed a bit in the late '90s, but actually only a pretty short period elapsed before they were back on their feet. And their capacity to

succeed economically is very great. They are a high-saving, highly productive, strong work ethic part of the world. And unless something happens to forestall that, they're going to be an economic region that's growing.

And, third, they're becoming more market-based. The orthodoxy, so to speak—the increased reliance on markets, the additional flexibility, and the more stable macro prices—is paying dividends in these regions as well. You still get a country like Venezuela that, but for its oil reserves, would be totally in some tank somewhere. And its politics are leading it in crazy directions, but it's the exception at this point; the others are more as I've just described.

CHAIRMAN GREENSPAN. Well, that's actually a fairly encompassing explanation. It implies that the lessons from 1998, when they were trying to fund in dollars and lend in the domestic currency—trying to unwind the rules of accounting, which got them all into very serious trouble—have been learned, essentially.

MS. JOHNSON. There are still shortcomings, no doubt. It's still the case that Asian market capitalism is not Anglo-Saxon market capitalism. And China could still find that the enormous task it has set itself of changing that economy at a very rapid pace could run into troubles. These are not guarantees, but I think it's in some sense a description of where we've been. And even all the shocks that we've all talked about so much—9/11, Enron, stock market collapses, et cetera—which were every bit as much global as they were U.S.-only, have been absorbed remarkably well, not only here but abroad.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. David, could you give us a risk assessment on your consumer spending forecast? In 2006 and 2007, you have consumer spending growth of 3½ percent, while the housing market cools and savings are accumulating. Would you just comment on how comfortable you are

with that forecast? You made reference to it in the formal comments, but I wonder if you are quite comfortable with the forecast or a little uncertain about it.

MR. STOCKTON. Well, I'm certainly uncertain about it. [Laughter] There's no doubt about that. But I actually see some risks on both sides of that forecast. On the upside, we are banking on a rather steep increase in the saving rate over the next two years. If our large-scale quarterly econometric model wants to extend the surprisingly low saving rate that we've seen over the past couple of years forward into the future, that suggests the possibility of a greater step-up in consumer spending. So there is some upside risk.

On the downside, some of the step-up that we have in consumption over the next two years is related to our forecast of an acceleration in compensation per hour, which, thus far, has remained very low. And if we don't get that step-up in compensation growth, we're not going to have the labor income immediately to support this pickup in consumer spending going forward. And I think that constitutes an important downside risk.

So I feel comfortable that we have the risks reasonably well balanced, but there are some big question marks, I think, on the consumption forecast going forward.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. I want to go back to the conversation with Karen. It seems to me that it would be helpful in the Greenbook to have much more analysis of the capital account than we do. In the Greenbook Part 1, there's a brief mention—you repeated it now—of the growing current account deficit. And I think we all understand that things that can't go on forever won't. But on the other hand, we might be able to have an idea as to some growing tensions there if we understood more about what's going on with direct investment and, say, how much of the capital flow is simply passively financed by governments that are pegging their exchange rates, like China and others.

There is definitely not much analytical material on the international capital account. So I would have a suggestion for more information there because the capital flows so dominate the shorter-run effects. A particular question in that context is: How much of the strength of the dollar this year might we attribute to the special tax break for this year? Certainly, corporations have been moving capital back into the United States. I don't know quantitatively how important that is.

I also have a suggestion for David. Looking ahead, the major share of GDP growth is going to be from the supply side of the economy. We're at close to full employment. And if you look at the Greenbook, the analysis there is very heavily weighted toward an understanding of demand factors. By my calculation there is, at least in one place, a half page on productivity in the labor market. But I think as we look ahead, we need a deeper understanding of the determinants of such things as structural productivity growth and labor force participation. So I would make a plea for beefing up that section of the Greenbook Part 1.

MS. JOHNSON. Just as a quick answer, we have put assumptions into the Greenbook about the size of those capital flows, as a financing of our deficit. They don't influence the current account because the earnings on U.S. investments abroad are booked as occurring on a flow basis—when they happen—whether they are repatriated or not. So the repatriation in light of this special tax break that will ultimately expire would be a financing flow, not a change to the current account. And probably the numbers are big enough to be meaningful but not huge, not dominant.

What we don't know—probably can't know—is the extent to which the flows back to this country are already in dollars in some sense. Are they earned in dollars or are they transferred into dollars over some long period of time? If they are sort of sitting there waiting to come back in dollars, they wouldn't have any particular role in explaining, say, the run-up in the dollar over the last six months or so. Without very disaggregated data, we can't really tell that. And the turnover in the

exchange market is so huge that numbers on the order of magnitude that this tax break involved would never show up as a sudden outlier in a particular month, or something of that sort. We've put something in there as an assumption, and it's probably a piece of the story. It's providing a little bit of extra ease in financing the current account deficit right now and is, therefore, a bit of support for the dollar. But I wouldn't think it is a dominant factor.

MR. POOLE. My plea, obviously, is not so much about that specific event, but about the analysis of the capital account in general, because I think it really does make a difference how much of the capital flow is direct investment. And what's going on there I think is very important for understanding—

MS. JOHNSON. I certainly don't dispute that it is useful to know things like the amount of private versus official financing, and the nature of some of the flows, and so forth. But let me caution you that, in the end, the actual data recorded for capital flows will conform to the current account balances. There are certain market equilibria that imply certain identities. So the fact that the numbers are what they are isn't so important. What matters are the terms on which those flows occur. So things like exchange rates, interest rates, and equity prices will tell you the characteristics of the returns to assets that had to be realized in order to get the flows to be what the flows had to be.

MR. STOCKTON. We will certainly take on board your recommendation to expand more of our analysis of the aggregate supply side. I would just say that this is an area where, in the past several years, we have made very significant changes in the underlying structure of the way we've produced the forecast. We present a great deal more detail in terms of the composition of the aggregate supply side of our forecast than we were doing five or six years ago. So I think we've taken steps in that direction.

I would also caution, just a bit, against page counting for judging the amount of analysis of the supply side. To get to output, we've got to go through all the various pieces of the spending side to get there. I hope in my remarks this morning I made it clear that we were interpreting much of the news that we've received about spending to have supply-side implications and that the information should not be taken just as a feature of aggregate demand. But we certainly share your desire to have a better and more thorough understanding of what is happening on the supply side of the economy, because it has proven over the last decade to be a very important source of macroeconomic variation.

CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Very quickly, on the Chairman's question to Karen. Clearly, there is virtue to massive competition. My most delicious irony is the fact that similarly dated Vietnamese debt now trades on a price basis richer, and on a yield basis lower, than that of Ford Motor Company.

[Laughter] It wasn't too long ago that we were killing each other. But we do have, increasingly, an independent central bank in Mexico. We have better reporting techniques in Brazil. And I would submit that while it may not be Anglo-Saxon capitalism, part of this is just a matter of realizing the value of capital and the desire to attract capital. Moreover, the improving at-home conditions make many of these countries increasingly attractive as an alternative. And the competition is good.

My question is to David, and maybe Brian or others. I wonder if you could—not now but with some kind of briefing or a paper at some point—give us a sense about the issue you mentioned of the lags in the effects of monetary policy tightening. I'm curious about the dynamics in a tightening scenario such as the FOMC has been pursuing here. How do you calculate the impact and the likely lag time intervals in the progressive process that we've been going through as opposed to a one-time shock? I assume that your models include a dynamic. I'd like to understand it better, and

maybe some of my other colleagues would as well. So it's not a question to be answered now, but if you'd be kind enough to do that, I'd be grateful. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Well, at the risk of going back into a discussion that I think President Santomero began and President Poole picked up on, I was struck by the slow pace of hiring that is in your projection. You have job gains going from 85,000 a month in the second half of next year to 50,000 per month in 2007. Having come through the last three or four years, numbers like that in monthly employment data would be cause for concern, and yet we still have growth not that far below potential. We have structural productivity growing, a narrowing of the output gap, and unemployment staying about stable—the difference being this rise in compensation per hour creating enough income to support the demand side of it. You probably have talked enough about this but I found that slowness in the pace of hiring a little disturbing after what we've been through. And I wondered what your thoughts were about it. Maybe I'm just asking the same question that Tony was asking in terms of the risks to consumer spending.

MR. STOCKTON. Well, I'll just add a couple of further comments that relate to your concerns. One is that, given our forecast of labor force participation—which is pretty mild, as you know—we think you should be lowering your sights as to what the underlying trend employment growth would be on the establishment survey. We're now putting that at roughly 90,000 a month, so that—

MS. MINEHAN. To keep pace with the growth in the labor force.

MR. STOCKTON. To keep pace with our slight downward trend in labor force participation. So if we're right about that—and as you know, there is considerable uncertainty about that piece of the forecast—then you're going to have to start thinking of 90,000 as a pretty good number. Now,

we're actually able to manage above 90,000 over the course of the next several months and into next year, in part because we do think labor force participation is still below its trend. And as we move back toward trend, we can get growth in overall payroll employment at a little above trend. So we don't really see the eventual slowing of employment gains as signaling a significant weakening in the labor market. But we do have growth a bit below trend further out when GDP growth drops a little below potential. So that's also an element of the forecast.

Now, you're right in some sense. If that were to occur in the context of gains in compensation per hour that are roughly equal to what we've had, rather than the step-up that we're projecting, we're going to have a shift in income distribution toward capital income and away from labor income.

MS. MINEHAN. Right.

MR. STOCKTON. And we think that shift would have a small negative effect for aggregate demand. The negative effect is not as big as you might imagine because, obviously, to the extent that the income distribution is going toward capital, the stock market would be strong, so the wealth effects on consumption would be a little larger or capital spending would probably be stronger. Still, if we're wrong about this piece of the forecast, I think it goes in the direction that things could be a bit weaker in terms of overall spending by 2007 than we're forecasting.

MS. MINEHAN. Yes. I wondered about that as a downside risk. The numbers jumped out at me, even recognizing your take on labor force participation. Thank you.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. I share President Poole's longing for more understanding of the productivity forecast. My understanding is that what you call "structural" is essentially a moving average. I'm interested for this forecast, since there is such a big markup in that, to know the extent to which the markup in the structural productivity outlook is merely an arithmetical consequence of a moving

average that had some recent upside data come into it. And the description about how you've altered your forecast included a reference to a technical factor that I think went over my head. Can you help us with that?

MR. STOCKTON. I'd be happy to, if you're really willing to listen to it! [Laughter]

MR. LACKER. If it's too much, we could do it offline. And more broadly, I'm interested in understanding the framework you have for forecasting this. It's not clear how that works. If there is a memo or paper that you could refer me to that laid out all the machinery, I'd really appreciate it.

MR. STOCKTON. We'd be happy to do that as well. In principle, the upward revision in our forecast for structural productivity growth this time was due to two factors. One was that productivity was a lot stronger than we thought. But it wasn't just that productivity was stronger; so it's not just this moving-average error term. It's also the fact that we're at a point in the business cycle, with labor markets having tightened as much as they have, when we would have thought productivity growth would be running a little below trend. So our previous estimate of the trend of  $2\frac{3}{4}$  percent, with actual productivity growing 3 percent, implied that productivity was being driven even further above trend. And in our underlying model, in which there is a cyclical and a trend component to productivity, that didn't really seem sensible to us at this point, given that we think labor markets are close to balance. We arrived at that view not just from looking at the employment rate but at plenty of other indicators of labor market activity, which suggested to us that the underlying structural trend in productivity probably has been faster than we thought. So we narrowed that tension by raising structural productivity rather than continuing to forecast that actual productivity was going to slow back toward our trend. I think that's the principal source of that element in the forecast.

Now, as far as the technical factors go—I'll be very brief here—our analysis of structural productivity uses nonfarm business output and hours as measured from the establishment survey.

Potential GDP is a measure of output measured using GDP—not output in the nonfarm business sector—and hours from the household survey—not the establishment survey. So there are two technical factors that tend to account for the wedge: the output growth in the nonfarm business sector versus GDP, and the growth in household hours versus establishment hours. And both of those factors have been significantly negative over the course of the last several years. That is, output, as measured by GDP, has been slower than nonfarm business output. And growth in hours, as measured by the household survey, has been considerably stronger than in the establishment survey.

So you need both of those factors, in essence, to reconcile structural productivity and potential output. That is why you might be puzzled as you look at the forecast wondering: Gee, they've got 3 percent structural productivity but only 3¼ percent growth in potential GDP. But, in fact, that's the way we do that element of the analysis. We're more or less forced into that particular position.

MR. LACKER. Okay. If I could just follow up for a second: In the late '90s, your forecast of productivity growth seemed to display a cyclicality—almost a responsiveness to recent productivity growth—that in hindsight took it up above where productivity growth came in and then down below it. Are you worried about the sensitivity of your forecast to recent data?

MR. STOCKTON. Well, the answer to that question is yes. [Laughter] But actually I'm not terribly worried that we're doing that in this kind of filtering, which uses the structural model and some statistical filters. We are downweighting the most recent observations because they haven't been through annual revisions. And there are plenty of reasons for thinking that the information content in that third-quarter GDP number is not as large as the information content of productivity measured in 2003. So we try to account for that as well.

MR. LACKER. Okay. I didn't realize that. Thanks.

CHAIRMAN GREENSPAN. Any further questions? If not, before we do the roundtable, let me reiterate something that I think has been communicated—namely, that Brian is going to discuss in some detail some of the back and forth that has been occurring here in recent days on the language of the statement. So please abstain from commenting on the statement in the first round until Brian has made his comments. Given that, have I discouraged anybody? [Laughter] President Moskow.

MR. MOSKOW. We're a resilient group, Mr. Chairman. [Laughter] We don't get discouraged easily.

Developments in the Seventh District have been mixed. The data released since our last meeting indicate that manufacturing expanded at a moderate pace, while housing slowed and employment continued to be weaker than the national economy. That said, our contacts seem to be more upbeat. We continue to hear reports of labor markets becoming tighter, leading to potential wage pressure. One of the national temporary help firms in our District mentioned that they are increasingly unwilling to guarantee their clients an hourly wage rate for the entire year. Another indicated that entry-level wages are going up 3 to 4 percent but that at the mid- to upper-skill level wages are rising 5 to 7 percent.

So I want to discuss two notable restructuring stories that point to the flexibility of the U.S. economy, albeit with government presence, notably on the pension front. One is United, which is at the end game, and the other involves GM and Delphi, which is just beginning. United's CEO is optimistic about their prospects, as they expect to exit from bankruptcy in February. Their business has continued to improve, and forward bookings suggest that strength should persist in the coming months. United is gaining market share, while the industry overall is reducing capacity. Having unloaded their pension liabilities on the PBGC and restructured their labor contracts and other contracts, they expect to be able to compete with the low-cost carriers, such as Southwest.

Incidentally, the CEO of United admitted to me that Ned Gramlich was right. He said that Ned's position on federal loans forced United to do it the right way and to get the needed concessions from workers, suppliers, and creditors, and assistance from the PBGC.

Turning to the auto industry, as I mentioned last time, Delphi's bankruptcy could result in some meaningful restructuring of labor contracts. But there is a significant risk of a strike that could seriously disrupt the auto industry, particularly General Motors. The negotiations are at a delicate point with three key players—Delphi, the UAW, and GM. Approximately 15 to 20 percent of GM's parts come from Delphi, and GM has provided some guarantees to the Delphi workers for their pensions and health care benefits. Clearly, the UAW is in a difficult position. A strike could well cause Delphi to close its U.S. operations and reemerge as an international firm with a far smaller union workforce. A prolonged strike at Delphi could also hobble GM. In a worst-case scenario, this could force GM into bankruptcy, which would hurt the UAW workers at both GM and at Delphi. As a result, all three parties have a strong incentive to avoid a strike.

There have been some positive signs. Delphi has postponed the deadline for an agreement from December 16th to at least January 20th, and GM has given some concessions to Delphi on prices. In my conversations with Rick Wagoner, the CEO of GM, he felt that while a lot of antagonistic public statements have been made, the most likely outcome was that sanity would prevail and a strike would be averted. But to avoid a strike, all three parties must throw something into the pot. And he could not rule out some wildcat strikes at individual Delphi plants. Of course, a settlement here does not solve GM's longer-term problem, which is loss of market share. And, as Dino mentioned, S&P downgraded GM's corporate debt—not GMAC, but their corporate debt—again yesterday by two notches.

In terms of the near-term outlook for auto sales, the consensus of 28 forecasters at our recent annual economic outlook symposium was for a small decline in sales in 2006 from this year's expected pace of 16.9 million units. GM and DaimlerChrysler's forecasts were in line with this expectation, but Ford's internal forecast is considerably lower, at 16½ million units.

Turning to the national outlook, economic activity continues to grow at a solid pace. Like the Greenbook, we see growth at or slightly above trend over the next two years, and this is also roughly in line with the consensus from our outlook symposium.

The prospects for inflation present greater risks. There are two plausible scenarios going forward. In the first one, the increased energy costs in 2005 lead to a transitory increase in core inflation in '06, but in '07 core inflation comes back down. This is the Greenbook baseline scenario. In the second scenario, the increase in core inflation is more persistent, in part because there is less slack in the economy in 2006. Furthermore, monetary policy has been accommodative for a long time and there has been an accumulation of liquidity which ultimately could show through to higher nominal spending. For these reasons, both inflationary pressures and inflationary expectations could remain elevated for longer than envisioned in the first scenario.

Our statistical forecasts, based on the Stock-Watson methodology, are more in line with the second, less optimistic scenario. Both scenarios are plausible, but the costs of the second one are higher. So from a risk management perspective, we need to put adequate weight on the second scenario. This may require more tightening next year than assumed in the Greenbook. But at this point, we just don't know. Consequently, we should make sure that the statement does not give a premature signal that we're near the end of the tightening cycle. But, as you requested, Mr. Chairman, I'll hold off further comments on the statement until the second round.

CHAIRMAN GREENSPAN. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I'd describe the outlook for the U.S. economy as solid, as the Greenbook has described it. Obviously, several factors contribute to this, including the forward momentum that's in the economy, the lagged effects of past monetary accommodation (which we've talked about in the past), very supportive financial conditions, and stimulative fiscal policy.

I would say that the evidence from the Tenth District is consistent with this broader outlook as well, but we also are seeing some slowing in certain areas. Energy activity in our area continues to expand at a very substantial pace. There is still a shortage of workers to support some of the expansion that's being sought. Manufacturers remain upbeat about future activity and plan increases in capital spending over the next six months. In addition, consumer spending, after dropping following the hurricanes, has rebounded solidly in our region. However, there is the point that David mentioned about housing activity, which does appear to be leveling off in our region. And while manufacturing activity continues to expand, it is at a somewhat slower pace. I would make note of the fact that we also are being affected by some of the GM issues, since GM is closing its plant in Oklahoma City and that will idle about 2,400 workers.

Turning to the inflation outlook, I expect core CPI inflation to be in the area of 2.3 percent next year, as higher energy prices pass through to higher overall core inflation and as the effects of our past accommodative policy show through. However, I expect that the increases may be temporary, as productivity growth remains strong and as energy prices recede from where they have been, if that continues. Nevertheless, I still would expect the inflation number to be in the 2 percent or slightly higher range.

But that said, I think there continues to be a good case for further tightening at today's meeting. Beyond that, I would say it is less certain, as Michael said, and I think in our statement the matter should be couched in the near term. And I'll stop there as well. Thank you.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. First, let me share a few thoughts on what we're seeing in our Southeast region. Overall, growth in our District continues at an acceptable pace, with most of the data and most of the anecdotal reports from directors and other contacts being positive across almost all sectors.

Recovery from the hurricanes is proceeding about as we expected, although it's hard to track all related economic activity, as many residents are still living in—and many businesses still operating from—the new cities to which they fled. Businesses in the affected areas that are open are now reporting brisk sales of autos and clothing, as belongings destroyed by the storm are replaced. Economic activity for major rebuilding and replacement of housing-related durables has not really started in any significant way. And if there is any new realization about the timing of that, it is that the rebuilding process—and consequently the economic impact—will be considerably more protracted than I first thought. It will probably be a process of five years or more. Almost half of electricity and telephone customers in the area still have not had those services restored.

Since we last met, there have also been more and more frequent reports of a definite chill in the residential construction activity and speculation in the frenzied coastal real estate markets. While that is yet to show through in any convincing way in regional and national statistics, those reports of a measurable shift in attitude and activity are coming from lenders, developers, and real estate salespeople.

Perhaps most relevant to the near-term policy considerations, we're still getting numerous reports of price pressures and determination to try to relieve those pressures by passing through the added costs. At our meetings last week, two directors from large national companies described what they characterized as new windows of opportunity to get price increases—windows they have already jumped through and gotten significant price increases that are sticking. They reported that even their tough customers, like the Wal-Mart's of the world, had accepted those increases. It was also reported that while regular gasoline prices have come down, prices of diesel fuel had declined relatively less. And while some rollback of fuel surcharges may be occurring, that is not yet evident.

Finally, on a regional level, early holiday sales are reported to be satisfactory. And our director who is chief financial officer of UPS reported that deliveries are running above plan at this point. Yet there is a realization that tracking total holiday sales may be more difficult than ever, as consumers shift their buying patterns from traditional, more easily measurable stores to a larger use of the Internet for purchases.

I also find the new information since our last meeting on the national front encouraging. The latest numbers on third-quarter GDP were a bit better than I expected and describe what I, too, would characterize as a solid expansion. We seem to have good balance across sectors. While it's reasonable to expect some marginal change in the mix of activity as we move into next year, I expect more of the same in 2006.

While the significant fallback in oil prices from their recent highs, the continuing strong competitive pressures, and the robust productivity gains have all worked to constrain inflationary pressures, it's my judgment that we could still see a rise in inflation as businesses continue to try to recoup their higher input costs. And leaning against those potential pressures should be our priority, at least for now.

Against that backdrop, I would argue that by some measures our current policy setting, at least going into this meeting, is still accommodative. And whether we choose to describe it as such in our statement, I favor staying on our policy path at least a bit longer. I think I look forward to our later discussion of what the statement should say. [Laughter] Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Mr. Chairman, Texas and the Eleventh District are even more surprisingly strong than the surprisingly strong rest of the United States. We see growth in retail sales and manufacturing employment, strength in housing starts, and high occupancy rates. Houston is 100 percent occupied in terms of apartments, as part of the resultant fallout from President Guynn's District. In every single dimension, the Eleventh District economy is solid.

There is price seepage from natural gas and other products. The most alarming will be utility bills, which are expected to jump by 40 percent next year. But what is taken from Peter often goes into Paul's pocket or, as we say, what is taken from Pedro goes into Pablo's pockets in Texas. And the best example I can give you is from the CEO of American Airlines, who told me yesterday that their fuel bill over the last two years has increased \$3 billion. As he put it, "The blood is being sucked out of me, and it's going to our friends down the street." In this instance, that is literally the case because Exxon is a couple of blocks away down the street. In terms of our local economy, this is healthy for us because we're energy neutral. In the activity surrounding energy, the rig count is up 23 percent this year. Energy company profits are soaring, as I referred to earlier. Oil royalty streams and mineral rights holdings are expected to rise dramatically, so we have a wash as far as energy prices are concerned. The bottom line is that Texas is a very happy place, the Eleventh District is a very happy place, and our economy is strong. And it shows you the dynamic nature of our country.

Nationally, both the Greenbook and anecdotal evidence indicate that the economy is equally solid. We see it in the retail sales data, as David reported today. But one of the aspects of those retail sales numbers, according to our interlocutors at the big box distributors, is that less than half the goods sold in what they call the “November frenzy” were deeply discounted goods. In other words, the sales were solid.

I spoke to sixteen CEOs and CFOs in preparing for today. I basically heard only one new concern, Mr. Chairman, which goes back to the point that Karen was making earlier about globalization. Also, I want to point out that one of the big homebuilders—Hovnanian—confirmed what you said, David. As he put it: Investors—meaning speculators—are exiting the business and it is returning to normal. But the common concern coming from the retailers, the rails, the shippers, the shipbuilders, and so on, was the following: Everyone I’ve talked to continues to try to figure out ways to exploit globalization. Each of them, from the IT [information technology] guys to the big box retailers to the specialty chemical firms to the service firms, wants to have offshore supply. One of the CEOs said, “We have a long way to go in exploiting China.” We’ve heard that forever. And one of my favorites was the comment, “China, India, and Indonesia can make Italian ceramics better than Italians can now or could 200 years ago.” [Laughter]

The problem that I’m beginning to hear seeping into the conversation, Mr. Chairman, has to do with U.S. infrastructure. If you read the New York Times article two days ago about Shanghai’s new deep water port, you have to realize that those facilities are being built to ship goods out of China, not so much to ship goods into China. And consider this, as reported by one of the shippers I spoke with: 50 percent of all the ships on order for construction are container ships. Capacity-expanding container business is increasing at 15 percent or more per annum to carry cargo from Shanghai and other parts of the world to the United States.

Now, this is good news on the disinflationary front. As the CEO of Northern Navigation, one of the larger shippers told me, "Transportation by ship will essentially be free when these numbers are realized in the marketplace." The bad news is stateside. We don't have the capacity to absorb it. Long Beach and the Northwest harbors are constrained. Work rules, according to our interlocutors, are very slow to adjust. But there are ways to beat the bottlenecks, and I just want to mention two. UPS reports that they have gone from 6 to 18—and now for next year 21—flights from China. Wal-Mart just built a four million square foot warehouse in the Houston port, in order to shift part of the burden from Long Beach. But it is evident that the enemy is us as far as exploiting globalization, and I think that's a long-term problem that we might want to take note of over time.

Presently, I argue that the economy is solid. We have very good growth. I'm still a little worried about inflation, but I'm convinced that we're nipping it in the bud by the action of the FOMC and that we might want to pause sooner rather than later. But, again, we might discuss that in the discussion of the statement. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. Incoming data since our last meeting have been quite encouraging. Economic growth over the next few quarters should be boosted by rebuilding and the full return of energy production in the Gulf. As rebuilding winds down and the lagged effects of monetary policy tightening take hold, it seems plausible that growth will slow toward potential, keeping unemployment around the current level of 5 percent, the scenario envisioned in the Greenbook.

The economy's remarkable resilience in the face of devastating hurricanes and three years of rising energy prices suggest that the expansion has gained footing and no longer needs support from monetary policy accommodation. Instead, a key issue facing us over the next few meetings is

whether policy might actually need to move to a restrictive stance in order to forestall inflationary pressures.

I will therefore focus my attention on the factors affecting the inflation outlook. To do that, we need to look first at the here and now and remind ourselves that recent readings on core prices have consistently come in at or below expectations. There are no signs of acceleration. In fact, core PCE [personal consumption expenditures] price inflation has slowed over the past year; the most recent reading of 1.8 percent over the past twelve months is down 0.3 from the preceding year. And the downward inflation trend has continued through this year, with core PCE inflation running at only 1.6 percent over the past six months, which is about the middle of my preferred range. Of course, even though recent core inflation data look pretty darn good, there may be forces at work that could undermine price stability. In my remaining remarks, I'd like to comment on some factors that could push inflation higher and consider their likely effects in the current situation.

The first risk to price stability is that, contrary to the Greenbook forecast, growth may not actually subside toward potential. So labor and product markets could tighten further, pushing unemployment below NAIRU, which current estimates place around 5 percent. This possibility is illustrated in the stronger aggregate demand scenario in the Greenbook. That simulation shows that monetary policy would, of course, need to tighten. But the inflation consequences would be modest, given a reactive Taylor rule monetary policy response. So to deal with this risk, it seems to me that policy need not be preemptive.

A sustained slowdown in productivity growth would pose a more challenging dilemma for policy and the inflation outlook. Fortunately, however, productivity growth over the past year has not slowed. Quite the contrary, it has been surprisingly robust. Output per hour in the nonfarm business sector grew more than 3 percent over the past year, beating out previous estimates of structural

productivity growth of around  $2\frac{3}{4}$  percent. As I discussed at our meeting a year ago, I think there are compelling reasons why productivity growth may well remain elevated for some time, having to do with the gradual diffusion of new technologies and workplace practices throughout the economy. Therefore, I concur with the staff's conclusion that the accumulated evidence indicates that structural productivity growth is around 3 percent and with the corresponding upward revision in the outlook for actual productivity. Given the sluggish adjustment of wages to changes in productivity, the stronger path of productivity reduces the rate of growth of unit labor costs, putting downward pressure on inflation. So productivity trends suggest a tempering of inflationary pressures, not an intensification.

Energy prices also pose a potential threat to inflation. But as I argued a few meetings back, the empirical evidence does not support significant pass-through of energy prices into core inflation. I won't repeat those arguments today but simply note, once again, that core PCE inflation has actually moderated, despite a nearly 30 percent increase in energy prices over the past year, on top of a 15 percent rise in the previous year. Moreover, energy prices on the whole have come down sharply of late, and, therefore, the risk of significant pass-through to core inflation has moderated as well.

In addition, it appears that the Fed's credibility has held up well this year, despite the supply shocks associated with higher energy prices and hurricanes. Survey measures of longer-run inflation expectations are about where they stood before the storms. Longer-run inflation expectations based on Treasury securities have come down about  $\frac{1}{4}$  percentage point since the last FOMC meeting and are now below levels of a year ago.

Finally, it's possible that wage growth could accelerate, putting upward pressure on the growth of unit labor costs and inflation. And, indeed, the Greenbook forecast projects exactly such an acceleration, reflecting lagged pass-through of earlier increases in both energy prices and productivity into wages. In particular, the Greenbook forecasts that hourly compensation, as measured by the

employment cost index, will increase 4.2 percent in 2006, following a 3 percent gain this year. It projects an even larger—1.7 percentage point—acceleration in compensation per hour in the nonfarm business sector.

To gauge the likelihood of such an acceleration in compensation, my staff examined the pass-through of energy prices and productivity into wages. They used forecasting models in which wage inflation is determined by lagged wage inflation, price inflation, productivity growth, and the unemployment rate. Now, it turns out that when the sample period used in the analysis includes the 1970s, our empirical work finds clear evidence of pass-through from energy prices into compensation. But when the sample begins in the 1980s, pass-through effects from energy prices to compensation are dramatically weaker or insignificant. This result is consistent with the finding I reported previously. There is no real evidence that energy prices pass through to core consumer inflation since the early 1980s. With respect to the pass-through of productivity growth into compensation, our staff finds evidence of only very gradual pass-through regardless of the sample period. Going forward, our models predict significantly less increase in compensation growth than the Greenbook over the 2006-2007 forecast horizon. We conclude from this empirical work that an increase in inflation due to a sharp acceleration in compensation growth is, at most, an upside risk to inflation and not the most probable outcome.

I opened my remarks by noting that a key issue facing us over the next few meetings is whether policy needs to move to a restrictive stance in order to forestall inflationary pressures. While we must obviously remain vigilant and respond to developments that threaten price stability, the evidence that we have at this time, in my opinion, points to relatively low and stable inflation going forward. Moreover, history teaches us that it is not easy to foresee the point at which past policy

tightening takes hold and the economy reaches a turning point. Therefore, it's important that we keep the lags of monetary policy actions in mind in our deliberations and not go too far.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you very much, Mr. Chairman. I think a fair reading of New England's economy is that it continues to be a bit weaker than the nation's as a whole. To be sure, this sense is skewed by conditions in Massachusetts, which alone accounts for about half of the region's employment. Nonfarm employment declined again in October after a somewhat bigger drop in September, softening the region's year-over-year job growth rate to about half of the nation's as a whole. But Massachusetts accounted for more than the recent net losses, with job gains in all of the other states acting to offset drops in the Bay State. Other indicators of state health show similar patterns. In particular, the Philadelphia Fed's coincident index shows growth in Massachusetts flattening while growth in the other five states is accelerating.

A question one could ask, and one that I've been asking myself, is whether employment data and indices derived largely from measures of job growth correctly provide the best sense of the overall climate of a regional economy—and in the case of Massachusetts, a state economy—that is driven increasingly by high value-added industries whose employment patterns reflect cycles of innovation more than traditional business cycles. Contacts in the high-tech, biotech, and software worlds all indicate that business is solid and that money to expand is freely available. Depending on the product, growth is either occurring or in the works, but often the related hiring is planned for lower-cost states outside New England or other countries. These businesses want their headquarters to remain in New England. They want to strengthen their links to the research being done in the major universities, and they regard the highly skilled labor that they need in their research activities as

hard to find and increasingly expensive. But when they expand more broadly, they are choosing to expand elsewhere.

Thus, there are areas of strength and weakness in some of the regional data. The states of the region seem to be doing pretty well fiscally, and that reflects the profitability of many of these high-tech types of businesses. But businesses that thrive on growing job counts, like commercial office markets, seem quite slow. And personal income tax collections are lagging a bit, at least relative to what the states have projected in their budgets. Somewhat surprisingly, consumer confidence has ticked up a bit despite the flat job picture, and residential real estate markets still seem strong, though the high end has lost a bit of steam. Travel and tourism has its ups and downs. The fall wasn't particularly good for leaf peeping, but the winter looks not bad because there has been some early snowfall for skiing.

The region is going to bear the brunt of high energy costs this winter, given its dependence on heating oil and expensive natural gas for electricity generation. That probably is the reason why overall business confidence has softened a bit. In my expectation, the region may well continue to lag the nation in job growth, but should prove resilient through the winter months. I think the mix of its industries is not only providing resilience to the region but also an ongoing impetus to the productivity growth we see for the nation as a whole.

Incoming data since the last Committee meeting were on the high side of our expectations and provided welcome assurance that at least for the time being the energy shock, hurricane destruction, and slight softening in housing markets did little to impede the underlying forward momentum of the national economy. And the recent robust data on productivity growth provide even more assurance that this pace of underlying momentum is occurring at a time when there may be more rather than less capacity. Indeed, if one assumes less of a downward trend in labor force participation than the

Greenbook projection, which is certainly in the realm of the possible, available capacity could be even greater.

Our forecast is perhaps not quite as optimistic as the Greenbook's, but it does see the same two rather distinct economic phases over the forecast horizon. In the near term, after a bit of a dip in the fourth quarter, which may not be much of a dip at this point, growth accelerates as hurricane rebuilding proceeds, federal spending increases, energy price growth rates flatten, and inventories are rebuilt. Then by mid-2006, the economy slows, as tighter monetary policy puts a crimp in real estate markets, the personal saving rate ticks up, as we hope it does, and the fiscal impulse wanes. During the near term, inflation pressures are expected to be more significant, with some pass-through of high energy costs to core inflation. Over the medium term, these pressures ease.

It's certainly possible for surprises on either side of this baseline. That is, we could see inflation around longer than we now expect or, on the opposite side, we could see demand falter, with consumer retrenchment in the face of slower hiring. I continue to believe that managing the risks of rising prices reduces the potential cost of mistakes, and that suggests some further tightening. But how long that will be necessary, in my view anyway, is uncertain.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. On balance, economic activity is growing at a solid pace in the Fifth District, though auto sales are faltering and housing markets are cooling. On the upside, employment conditions have been strengthening, with signs that the job numbers are increasing even at District factories. Outside of autos and big-ticket items though, retail sales strengthened substantially this month. Retailers indicate that holiday sales are solid, and they've become more optimistic about prospects for the first half of '06. Auto sales are weak, though, and SUVs remain unpopular even after the season's first snowfall. Services firms are also upbeat, with

revenues and employment growing over the last two months. Home sales remain at high levels but we are receiving widespread reports that activity is decelerating, particularly in northern Virginia where markets have been quite robust in recent years. A number of independent reports describe “a return to normalcy” in residential real estate markets, with houses actually being on the market and not getting multiple bids on the first day. Manufacturing continues to hold its own. Although shipments and new orders were softer in early December, the hiring index was up for our District, and firms have become notably more optimistic about their early '06 prospects.

District price pressures seem to have eased somewhat in December. Although retail prices were reported to have advanced at the same strong pace as in November, outside the retail sector services' prices have decelerated from October to December. Manufacturing price gains peaked in November in our series, and our preliminary numbers show that both prices paid and prices received slowed sharply this month.

Turning to the national economy, we've received a string of favorable data since our October meeting, suggesting both that the economy had considerable momentum prior to this fall's storms and that the effects of the storms on economic activity outside the affected region and the energy sector have not been as large as feared. I'm particularly encouraged by the continued strength in business investment spending in the present quarter, as evidenced by capital goods orders and the ISM numbers. I'm also encouraged by anecdotal reports of a cooling in District and national housing markets. These reports are consistent with a continuing handoff from residential to business investment. That said, I'm tempted to paraphrase Solow, though, and say that the slowdown in housing appears to be visible everywhere but in the housing activity data. [Laughter]

Consumer spending has held up quite well. My sense is that the most important source of this stability and strength is households' beliefs about their real income growth in the near future. For this

reason, given the Greenbook forecast for income growth in the near term, I would not expect a flattening of housing prices to seriously dampen consumer spending. Rather, I expect, consistent with the Greenbook, consumer spending growth to come in on the strong side going forward, with the saving rate rising only slowly.

The inflation picture has also improved notably since our last meeting, in my mind. The October core PCE number was heartening, and inflation expectations have been well behaved. Both survey measures and TIPS compensation spreads have come down off the post-Katrina highs they reached earlier this fall.

While the inflation picture is somewhat better, it does leave some room for concern, in my view. This Greenbook forecasts a 2.2 percent core inflation rate for the first half of '06, less than the last Greenbook, but it still makes me somewhat uncomfortable. With oil prices appearing to have found a stable range in the neighborhood of \$60 a barrel and with natural gas prices remaining high and volatile, I think it will be several months before the risk of pass-through can be completely put to bed. As for the econometric evidence about pass-through, I'd note that expectations regarding our policy response represent a latent variable that of necessity is omitted in most econometric exercises. I take less comfort from the econometric evidence than you do, President Yellen. Our preemption may be required for the pattern you found in the '90s to actually continue to be confirmed in the data.

In the meantime, I think we need to ensure that the public understands our resolve with regard to inflation. And the real funds rate in the neighborhood of 2 percent is very likely too low for an economy that's in a sustained expansion with relatively full resource utilization. So I think it's appropriate to follow through today with a 25 basis point increase in the funds rate.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. There has been little change in Third District economic conditions since our last meeting. The regional economy continues to expand at its potential pace, which is somewhat lower than in other parts of the country. Payroll employment is increasing steadily in our three states, and the tri-state unemployment rate fell to 4.3 percent in October, which is its lowest level since May of 2001.

Regional manufacturing activity continues to expand at a moderate pace. The index of general activity in our manufacturing survey eased slightly to 11.5 in November from 17.3 in October. Although there has been some month-to-month volatility in the index this year, it has generally been near the average that was recorded in the 1990s expansion.

Retailers report a slightly better sales figure for October and November compared to the same period a year ago. In general, sales of luxury goods and consumer electronics continue to expand more strongly than other lines of merchandise, and discount stores had better results than mid-priced department and specialty stores.

While construction continues to be a strong sector in our region, we are beginning to see early signs of moderation in the housing market. These signs do not point to a sharp drop, only a slight softening of demand. As elsewhere, permits have declined and real estate agents reported slower sales in October and November. Some agents also noted that the number of existing homes on the market has risen and that the numbers of offers per house and above-asking-price bids have declined. There was also a slight easing in price appreciation in each of the three states in the third quarter, and this moderation appears to be continuing in the fourth quarter.

We continue to see signs of higher prices for industrial goods in our region. There was a sharp increase in the price indices in our manufacturing survey in October. This eased only slightly in November and remains near a high point during this expansion. Firms also expect prices to remain

elevated. The future price indices are high relative to most readings during the expansion, and the results of a special survey question indicate that cost increases are widely anticipated for all inputs next year. These expectations are widespread across firms—and more widespread than during the summer period when we asked the same question. Indeed, while our business contacts expect continued moderate expansion in business activity, rising prices beyond those in energy have become more of a concern for firms in our District.

Turning to the national economy, I note that the Greenbook forecast has been revised to show more underlying strength in the third and fourth quarters compared to last time. It's more consistent with my own view on the national economy. Incoming data over the intermeeting period suggest that the economy retained a good deal of upward momentum. The third-quarter preliminary GDP figures showed broad-based strength in consumption and fixed investment growth, with strong productivity gains. Despite the dislocation from Hurricane Katrina, we have sturdy underlying job growth and a low unemployment rate. Consumer confidence has partially recovered from post-hurricane lows, and consumer spending outside autos continues to advance at a moderate pace. Business spending has also strengthened since the summer, and manufacturing productivity and business investment continue to advance. In my mind, the risks to growth are slightly on the upside, as I read the data as supporting continued underlying strength.

The official inflation numbers and readings on inflation expectations have been somewhat reassuring over the intermeeting period. To date, we've seen little pass-through, as a number of people have noted, of higher energy prices into core inflation, and we've also seen some decline in energy prices. In addition, both near-term and long-term inflation expectations have declined a bit. This news is clearly favorable to the inflation outlook. However, it seems somewhat at odds with what we're hearing from our business contacts. They indicate that they're facing higher input prices

and have recently found it somewhat easier to raise their own prices in the current environment of quite strong demand. This view has also been supported by our own and other manufacturing surveys. So I remain concerned about inflationary pressures, and I believe that an uptick in inflation is, indeed, a risk.

Therefore, a prudent course of action today, in my opinion, is to continue to gradually move rates up. Whether such a move is closing in on the equilibrium real rate from below or whether such a move will put the real funds rate above the equilibrium value or place it in the range of uncertainty around the long-run value is an interesting question. So is how we will explain what we are going to do. But I'll defer my views on these issues until the second part of our discussion. Suffice it to say I look forward to that. [Laughter]

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. What a difference six weeks can make. At our last meeting, the Greenbook offered two alternative scenarios—stagflation and a consumer sentiment slump—which at least from the Fourth District's perspective seemed plausible and worrisome. In early November, we had to consider the possibility that output growth might weaken even as inflation accelerated. Fortunately, the output and productivity data that we've received since that meeting have been on the upside, and the inflation news has been generally encouraging. Although there are still various scenarios to worry about today, stagflation and a consumer sentiment slump no longer appear to be among them. My own information-gathering process during this intermeeting period leaves me very comfortable with the Greenbook baseline, which now expects more favorable paths for output, productivity, and inflation than it called for at our last meeting.

I have a few observations about each of these. First, output. The national pace of economic activity appears to be on the upswing, even though in my own District the economy appears to remain

on a slower improvement trend. Bankers report that the commercial loan pipelines are filling up, and competition among lenders is very strong. As I said, my District has been trailing the nation. The automobile industry has a large weight in my District, and recent developments there, though not unexpected, are pretty dreary, as President Moskow reported. The Big Three automobile companies and their suppliers are under intense pressure to downsize and reduce costs, especially labor costs. Many plant closings and layoffs have already been announced, and the dark clouds hanging over the industry are already having adverse effects on many communities. But most business leaders I speak with outside of the automobile industry are optimistic about their national markets as they look into next year.

Next I'll comment on productivity. The CEOs that I talked to are still working very hard to generate profits by increasing productivity. I'm amazed by how frequently and uniformly CEOs talk about efficiency efforts under way in their companies. A natural consequence of the productivity culture, of course, is that business people are watching their head counts very closely, even as their sales are expanding. Hospital executives are especially bullish about their ability to generate significant productivity gains, and they've been ramping up their capital spending on equipment and facilities. One of my directors works for a large commercial construction company and reports that this is a nationwide trend.

Finally, inflation. Retailers tell me that they've trained their customers to shop for bargains only too well. Consumers are relentless in their hunt for bargains, and Internet shopping is growing rapidly in popularity and making that hunt for bargains easier. Retailers in the District tell me that they expect consumers to hang back and wait until the bitter end for steeper discounts, and those discounts are going to inevitably rise as Christmas looms close. Consequently, retailers expect to turn over their inventories, but they anticipate having to give up some of the normal profit margins that

they seek at this time of the year. Discounting is extremely intense. Sales volume, then, should turn out well, but profits may be disappointing.

Some manufacturers say that they are finally getting a little traction with price increases above and beyond the energy surcharges. But most manufacturers that I talked to report that competition remains very intense and they emphasize that they have little pricing power. Although businesses have had to absorb price increases for many of their commodity inputs, several business executives note that raw materials prices have stopped increasing for the most part and, in many instances, have started to decline.

So as I look at the national economy, I'm very comfortable with the Greenbook baseline. I expect productivity growth to hold up rather well next year, along the lines of that faster productivity growth alternative scenario in the Greenbook. Although I indicated in my report at our last meeting that we could see stronger pass-through of energy prices, I was not hearing that from my business contacts in their reports this time around. In fact, many of them said that the energy and commodity price shocks that we've experienced in the past two years could move through our economy without elevating core inflation rates.

The disappearance of the stagflation and consumer sentiment slump scenarios and the emergence of other risks serve as a reminder to me that the future, even the near-term future, is uncertain. The 70 percent confidence range surrounding the Greenbook baseline projection is wide enough to include all of the alternative simulations. I believe, as a couple of others have already said, that with another move today our policy accommodation will have been substantially removed, making the timing and extent of additional firming more uncertain for me. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Okay. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I've been debating whether we should characterize the expansion as vigorous or solid. I decided that it's vigorously solid. [Laughter]

On the consumption front, to give you an idea how strong demand is, my Wal-Mart contact says that 30 percent of the TVs they sell are now digital, up from 5 percent last holiday season. They have greater sales also of other higher-end—medium and premium—price points. And he says that inventory, if anything, is on the short side of desired levels, particularly for the higher-end items.

A pervasive theme in my discussions with business people is that construction costs are rising rather rapidly. Wal-Mart says 10 to 15 percent, and that seems to be generally true across the economy, according to my contacts. The transportation industry, I think, is stretched at this point. For quite some time there have been problems with rail transportation of coal. Our contacts with a power company in the St. Louis area said that they've been able to build stocks of coal at power plants but the level is still well below the normal, desired level.

A contact with a major trucking company said that they have no plans to increase capacity in their truck business, which is about 30 percent of the total. They plan a 5 percent increase in capacity in the intermodal area—that's the piggyback business—and 10 percent capacity expansion in the dedicated truck business, which involves trucks for particular companies like Wal-Mart.

My UPS contact said that they have been stretched quite tightly this holiday season; he mentioned that DHL has been having severe operational problems at its Wilmington, Ohio hub. UPS could not find extra lift, as they call it, on an ad hoc basis and had to have work-arounds to have enough capacity to meet the demand. UPS is planning to expand its China-to-U.S. capacity next year by 26 percent, which reinforces what Richard said a few minutes ago.

There is a risk of disruption because of strikes. UPS—and FedEx is right behind—is coming to the end of the negotiation with their pilots, which has not been going well. The pilots in those

companies are now the best paid in the industry because the passenger airlines have reduced pilots' pay. The pilots' union is apparently adamant in wanting a larger piece of the profits of the company, so I think we should not by any means rule out the possibility of a strike at UPS early next year. My contact there said that the level of frustration within the company about the various job actions by pilots is very high. Pilots have been calling in and saying, for example, that they're fatigued and can't fly, and they have caused a lot of disruption by tactics of that sort.

I think those are the only comments I want to offer. Thank you.

CHAIRMAN GREENSPAN. Why don't we break for coffee at this time and come back in fifteen minutes.

[Coffee break]

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me try to restart this discussion by saying, first, that I largely agree with the Greenbook assessment of the economy and, in particular, with the overall positive economic outlook it presents. This is consistent with the incoming data on the national economy that we've received recently and with the preponderance of recent reports on the District economy as well. Notably, the District is benefiting from an overall good year in agriculture, sustained improvement in the manufacturing sector, and what I would call positive substitution effects stemming from hurricane-related disruptions elsewhere, which have led, for example, to more shipping out of the Port of Duluth-Superior than otherwise would have occurred, more volume for local trucking firms, and so forth.

One minor difference I might have with the Greenbook outlook pertains to the labor market and the unemployment rate. It seems to me that the forecast for economic growth in 2006 overall is not terribly different from what we've had in '04 and '05. And cumulatively, the unemployment rate

dropped nearly a full percentage point from the end of 2003 to the end of 2005. Using that as a rough guide or rule of thumb, I would think we'd get at least some modest further decline in the rate of unemployment next year. I would hasten to add—and I think this is potentially a more important and maybe also a more controversial point—that even if we get that drop in the unemployment rate, it wouldn't affect my inflation forecast. In fact, looking at the totality of the information available, I don't think that the risks to the core inflation outlook are skewed one way or the other, and I'm inclined to agree with Dave Stockton's assessment that inflationary pressures are close to topping out. I say this because incoming data on core inflation have been relatively favorable, bond markets suggest to me that inflation expectations remain well anchored, and a lot of policy accommodation has been removed.

Indeed, summing up these factors as well as the results from most versions of the Taylor rule presented in the Bluebook, calculations with Fisher-type interest rate equations, and the Greenbook forecast itself, it seems to me that after this meeting we will at least be very close to the point where we will have raised the federal funds rate sufficiently for now. Thank you.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Our forecast for the national outlook has not changed substantially since the last meeting, and relative to the discussions so far, I guess we're slightly at the stronger end.

The recent data have been encouraging both here and internationally. The underlying pace of demand growth seems pretty good to us—good enough to raise the probability of the expansion continuing at a pace at or slightly above trend. The inflation news has also been reassuring, though underlying inflation is still running somewhat above what we'd like to see over time.

We believe these conditions justify some further tightening of monetary policy, perhaps another 50 to 75 basis points. We are, therefore, comfortable with the expectations now built into the market. And with that monetary policy assumption, we think the risks to the forecast and to our objectives are roughly balanced. So, relative to September and October, we see somewhat less downside risk to growth, perhaps even some upside risk, and somewhat less upside risk to inflation. As this implies, our view is very close to the Greenbook.

Let me mention a few other points. The apparent strength in productivity should make us more comfortable about the sustainability of the expansion and a bit less concerned about the near-term inflation risks because, of course, if the productivity growth stays stronger longer, we can be more confident that consumer spending will stay reasonably strong even if a more substantial slowdown in housing materializes. Scenarios in which more-moderate house price appreciation or some decline in housing prices leads to a sizable increase in the personal saving rate are probably less plausible or less troubling in an environment where consumers are more confident in the outlook for the economy or more confident in their future income growth.

The productivity news, combined with continued moderation in the core inflation numbers and the moderation in measures of inflation expectations, make the inflation outlook somewhat more favorable. But against these factors there are others that justify some continued attention. Of course, overall inflation is still high, even though we expect it to moderate. Various measures of underlying inflation are still above what we would be comfortable with over time. There probably is still some energy cost pressure in the pipeline. And the TIPS-derived measures of inflation expectations over the medium term, if you adjust for the carry effect, have not really moved down that much. With compensation growth accelerating, we would expect eventually to see some upward pressure on labor costs, though of course less than would be the case with lower productivity numbers. Moreover,

surveys and anecdotal reports of pricing behavior, as we read them, suggest that businesses are able to pass on some share of their increased costs. So for these reasons, even with the additional tightening priced into the markets, we probably face some modest upside risk to our inflation forecast and to our objective, and we should continue to lean against this risk in what we do and what we say.

We don't see evidence yet to support a concern that the path of the nominal fed funds rate now priced into the markets risks going too far. Housing may be slowing a bit, but not really much. Other spending indicators look strong—probably stronger than we thought—and the strength is broader than it has been across the components of GDP. Expected real rates don't suggest a high degree of concern, in our view. It's just some concern, but not acute concern about the downside risk to future growth. If you try to take out expected inflation from forward rates, it looks as if real rates move up over the 2- to 5-year horizon. Equity prices, credit spreads, and the implied volatility of most asset prices don't seem to suggest a lot of concern about significant deterioration ahead in the pace of the expansion.

Although we don't think the narrowing of the term spread itself or the low overall level of the yield curve offers clear guidance about monetary policy—clear guidance in terms of arguing for a softer or firmer stance than the other fundamentals might suggest—we're somewhat more inclined to take the view that this change in the structure of term premia suggests we will have to do more than otherwise would have been the case. So all of this suggests to us that we should continue to tighten further and signal that we think we have still more to do.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. The news over the intermeeting period has suggested some shift in the nature of the inflation risks faced by the economy. Low and stable core consumer price inflation together with declining retail energy prices and some continued edging lower

of inflation expectations seem to imply a reduced threat from near-term feed-through of energy prices to expectations or to core inflation.

At the same time, however, information on output and demand indicate that the economy remains on a growth track which is expanding a little more quickly than potential supply. And this is a trajectory that would increase pressure on resources at a time when those resources are already being fairly well employed. The reasons for the greater-than-expected momentum in output are unclear. Some of the strength may represent a more muted response to hurricane disruptions or energy prices than anticipated, but much would seem to be related to underlying strength in aggregate demand. The upward surprises in demand in the third quarter were global, not just in the United States. Increases in industrial commodity prices and sizable gains in equity prices around the world evidence widespread economic strength and expectations that it will persist.

Added demand and rising equity prices have provoked little, if any, offsetting tightening in financial conditions in credit markets. Long-term interest rates globally were little changed on balance over the intermeeting period, and risk spreads out the yield curve and across risk categories continue to be low, reflecting the basically optimistic outlook of investors.

Perhaps the resilience of the global economy to oil price increases and persistent expansion in global GDP, including in such laggards as Japan, are slowly increasing the confidence of non-financial businesses as well. In the United States, the growth of business investment has come into line with past relationships with the cost of capital and changes in output, though the level of investment still remains a bit lower than might be expected.

As a consequence of this strength, one question is whether the current constellation of interest rates and asset prices, including expectations of the funds rate topping out in the 4½ to 4¾ percent range here, is tight enough to produce the moderation in growth needed to keep the economy in the

neighborhood of its potential and to keep inflation stable. In the staff forecast and in the markets, such a rise in the funds rate is seen as sufficient to contain inflation, and that strikes me as a reasonable estimate, pending further information.

Although long-term rates haven't changed much for several quarters, short- and intermediate-term rates have increased quite a lot and will continue to move higher as we firm policy. These higher rates should exert increasing restraint on spending, especially for households that have been relying on borrowing at low short-term rates to short-circuit liquidity and income constraints when buying durables or houses.

The slowing in consumer credit growth and mortgage loan applications in recent months may, indeed, indicate that higher short- and intermediate-term rates are beginning to bite. Moreover, perhaps as a consequence of the rise in borrowing costs, we do see some signs of a cooling in housing markets, as many of you remarked. Certainly the perceptions about housing markets of both builders and buyers have deteriorated noticeably in recent months, and the shift in attitudes may be particularly important when a significant portion of the activity in this market has been linked to investment demand. Based on these indicators and others, a slowing of house price appreciation and a moderation in construction activity next year seem to be a reasonable expectation. Such a slowing is a critical element behind the moderation in growth next year in the staff forecast, and I suspect in the market's assessment as well.

Still, we need to see more concrete evidence that this channel is working as anticipated, both in prices and in activity, before we can be confident that demand is likely to moderate. Nonetheless, the incoming information also reinforces the notion that we can afford to retain the gradual path of policy tightening as we look for signs that moderation is coming. With the upward revision to estimated structural productivity growth, the economy is not expanding very much above its long-run

growth of potential. In addition, the better productivity and the downward revision to compensation data show the increase in business costs being held in check better than had been evident. And the higher rate of growth of structural productivity should help to hold down that increase in costs going forward. Moreover, the markups of price over unit labor costs have risen appreciably in the last two quarters for both nonfarm business as a whole and, within that category, for nonfinancial corporations. And those markups are close to the record highs of the mid-1990s, suggesting that businesses have some room and incentive to absorb some of the increases in labor costs that might be coming.

As a consequence of these developments, I think we can be a little less concerned about the immediate threat of higher inflation, though we still need to focus on forestalling the potential for supply-demand imbalances to develop over the medium run. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. The concept of the known unknown came to the national consciousness about a year or two ago, and I sense that it's very much in this room today. The baseline forecast calls for a very nice, soft landing to potential growth with contained inflation if we just tighten our policy one or two more turns. I'm certainly prepared to accept that forecast for the purpose of today's meeting, but the uncertainties or the known-unknown factors around it are to me quite obvious. To me the risks are clearly to the upside with respect to growth, but surprisingly may be more balanced with respect to inflation.

It is easier to see an upside growth risk than a downside one, in large part because the incoming data have been surprisingly robust, making a slowing just a quarter or two away seem a little bit of a stretch. Much of the waning wealth effect on which the baseline is built is due to a slowing in the housing market. It is true that some of the indicators suggest some moderation there, including a slight edging off of mortgage applications and a souring of home-buying attitudes. But

when lined up against the actual strength shown in home sales themselves, both existing and new—and also prices, which have continued to appreciate at a double-digit pace through the third quarter—it is hard to say that the housing market is anything but robust.

A second element of the wealth effect that the Greenbook assumes is that the equity price appreciation will be no more than needed to keep the current level of the equity risk premium about stable. But again, it is easy to see some upside potential here. The equity risk premium is now above average. The recent run-up in equity prices, coupled with sustained high levels of productivity growth, an attractive profits outlook, and healthy corporate balance sheets all make it perhaps a little more likely that equity prices will rise rather than fall, and indeed, rise more than expected. If this were to occur, the earnings-price ratio would decline and the equity risk premium would return to the normal range, and in doing so would provide more equity wealth impetus to the economy than perhaps the baseline assumes.

Finally, global growth is a surprise to the upside. As Dino indicated, equity prices have shown remarkable strength globally. Monetary policy itself has in many cases been somewhat stimulative and generally financial conditions have been supportive of growth. All of this suggests a bias toward faster global growth due to accommodative financial markets broadly.

On inflation, I judge that the risks to the baseline forecast are perhaps a little better balanced. While the upside growth risk would certainly pressure resources with inflationary consequences, that is not the entire story. For one thing, inflation has come in a little softer recently than we had expected. Secondly, energy prices seem to have flattened, and market participants expect them to moderate even further, providing a rapid diminution of the upward momentum to headline inflation. Thirdly, import prices seem likely to remain contained; and for both energy prices and import prices,

pass-through has been relatively low. Finally and importantly, longer-term inflation expectations are moderate.

I would also add in this regard something that has not been much discussed here: Labor compensation itself has been on the weaker side, even as resource utilization has tightened. And finally, the productivity growth story, I think, has shown continued robustness. In this regard I'd point out that we talk a great deal about the upward adjustment to the structural productivity growth in the staff forecast, but all they've really done is just to maintain what has happened from 2001 to 2004. So maybe we've put too much weight on the temporary downward movement as opposed to just recognizing that things haven't changed very much.

So given this view of the risks around the forecast, why do I propose that we accept the baseline for purposes of today's decision and communication? First, I am mindful that policy works with long and variable lags. While the risks for us are not totally balanced, the greater weight of the evidence, I think, is still for a good outcome, given that we have moved rates up quite considerably. And with inflation expectations still well contained, I think there's no reason to adjust market perceptions of what we're likely to do going forward. If those two facts did not adhere, my judgment might be different.

Secondly, one would have to say that while the housing sector story is yet to come, there are, as we've heard around this table, a large number of anecdotes all pushing primarily in the same direction—supporting, I would think, the baseline.

Third, I take some comfort in the fact that the baseline forecast is shared roughly by most outside forecasters. The Greenbook does not seem to be out of the trend. The Blue Chip consensus is that after more than two years of above-trend growth, activity in 2006 is likely to moderate to its trend rate and perhaps a bit below by the end of the year. Importantly, the fed funds assumptions that

underlie the Blue Chip are not distinguishable dramatically from the Greenbook forecast. President Moskow has already talked about what happened in Chicago at their outlook symposium. Again, the consensus seems quite consistent with our forecast from the staff. And the NABE members we met with in this room not too long ago also expect growth to be in the range of 3.25 to 3.5 in 2006.

Finally, I am willing to take the baseline as the basis for policy today because I recognize that our language will convey the proper sense of caution to reflect the risks and leave us with the flexibility to respond to other changes. I will delay any further comment on that, as you have suggested, until the second part of our discussion.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. At each of our last eleven or twelve meetings there has been a presumption in the analysis for several more moves of tightening. And while I agree that a ¼ point increase in the funds rate is appropriate for today, I no longer find in our analysis a presumption of multiple moves to raise it further.

From Q4 to Q4, the rise in core PCE prices is estimated to be 1.8 percent in '05, up to 2.1 percent in '06, and back to 1.8 percent in '07. Now, the alternative scenarios for core PCE include a single option heavily driven by a presumed greater impact of rising energy prices on core inflation. And as I indicated to President Yellen, I'm interested in going back and rereading that analysis. The Greenbook forecast is for the fed funds target to rise to 4½ percent and be maintained at that level. I just looked at the chart in exhibit 1 that was handed out at the break and compared it to the chart that was in the Bluebook, and the market seems to be even more sure that we will overshoot and then retreat with respect to the fed funds rate.

I share President Stern's analysis with respect to the equilibrium real rate and the extent to which our fed funds level relates to the range of values under the commonly used Taylor rules. I

think there's a legitimate concern about the effect a premature pause would have on inflationary expectations, and I take that very seriously. But, again, I do not see yet in our analysis where that needs to drive our concern. Therefore, unlike in previous meetings, where there was a presumption of multiple increases, I think that perhaps after today we would need to look for a justification for such increases. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I want to echo Dave Stockton's analogy of tidings of great joy in this forecast. I think the upward revision in growth and the downward revision in inflation are developments that we all welcome at this point in the economic expansion.

As I tried to assess some of the information to see where I would want to come out on policy, I tended to take an approach similar to the one President Yellen took, in saying: Where do we stand at this point in our effort to remove accommodation, and where are we going as we move forward? In the alternative scenarios laid out in this Greenbook, there is really only one where long-term inflation expectations lose their anchor and which therefore gives me much concern. As I looked at where we are on inflation, I was struck that there is some good news and some bad news and that there are currently risks on both sides. Last year we saw inflation coming up from extraordinarily low levels—moving up from 1 percent to over 2 percent. It rebounded quickly, and I was one who was quite concerned by how quickly inflation had moved up. In the last six months, though, it has been 1.6 percent, which sounds like a fairly good area for it to be in. But the fact that it rebounded so fast clearly indicates that we always have to be very alert to developments on that front, because prices can move rapidly.

The energy pass-through, I think, is a risk for higher inflation. I'd love to see the analysis that San Francisco has done on that issue because, depending on what level of costs are passed through, I

think we could see real concerns about disruptions and risks to the economy going forward—as a consequence, for example, of believing that energy prices are going to stay in a high range for several years or seeing the possibility of outright shortages in areas like natural gas.

We've also seen that other central banks in the world are now expecting stronger growth and higher inflation in their economies. The ECB [European Central Bank], as was mentioned earlier, finally raised its policy rate, and even the Bank of Japan is coming out of a zero rate world. So some of the cushion we've had worldwide may be moderating, and that could produce more risks on the upside on inflation.

On the other hand, when I look at what has been happening with jobs growth and labor compensation, I continue to be struck by how moderate the growth in compensation has been. The productivity story is clearly one reason for this. The numbers continue to amaze me at this point in the cycle. It's easy to achieve productivity gains in a company early on when you have excess capacity. But this many years into an expansion, it really takes a ton of attention and effort.

Another thing that often comes up in my conversations with business executives is this: They are sitting at very high levels of profit and cash flow generation; and when you ask them about their main challenges, they still say their primary challenge is to maintain profit growth. If you start to dig into that, you find that it's beyond just managing wage costs and looking at capital. The lessons they learned in the '90s in terms of really changing the way business processes are run are continuing to play a role in all of the decisions they're making on issues like inventory management—not tying up capital either in inventory stored or in warehouse capacity.

As I looked at last month's numbers, inventory-sales ratios hit record lows. So clearly, businesses are continuing to learn more and more about how to keep inventory levels very, very low—even though they're trying to customize the delivery of products. And they are doing that

through better information systems and better order management systems. They also are focusing a great deal on quality control, particularly in services and retail businesses, and in business services where that is a key differentiator with the competition. But better quality also has major cost benefits because it reduces errors and the need to redo work and it focuses on the timeliness of delivery. And these are the kinds of values beyond prices that customers are rating as increasingly important. So firms get both greater efficiency and value added for their customer base more than in the past.

And finally, outsourcing—and I'm talking not internationally but simply outside of the core enterprise—is a business practice that evolved in the '90s and has proven to be very important. In the old days when you ran a big corporation that was vertically integrated, there were cost centers throughout the organization and it was very hard for CFOs to get a handle on controlling costs. Now that the culture has become “if it isn't a core function, you ought to try to outsource it,” the process of renegotiating with the contractors annually or semi-annually or every three years and of going out for other bids puts continual pressure on attaining productivity improvements and a favorable cost payback. But when the function was embedded in the bigger organization, the social politics sometimes got in the way and made it difficult to wring out the costs. The fact is that firms now try not to do everything, and to outsource functions unrelated to their core business. That this has become an ingrained practice in many companies is another theme I'm hearing. So, in short, I'm finding that changes in business practices are the focus of a lot of companies. And they believe that despite higher costs, they are going to be able to improve the value with modest price increases going forward.

Pulling all of that together, I tend to think that we are very close to the end of the increases in interest rates that we need to implement. There are risks on both sides, but it strikes me, based on the Greenbook forecast, that we're getting to full potential in a very orderly way. And as was mentioned

a minute ago, according to the Bluebook, the real fed funds rate that we would have with a 25 basis point increase today is at the midpoint of the range of the staff's estimates of equilibrium. Also, it's above the funds rate derived from the policy rules for all of the alternatives. So we are close to where I think we need to be, given the forecast. As a result, I think we really do need to talk about how to make this transition and change our communication.

CHAIRMAN GREENSPAN. Mr. Madigan.

MR. MADIGAN.<sup>2</sup> Mr. Chairman, earlier you referred to the comedic talents of my two colleagues to the right. For my part, in drafting the Bluebook over the past week, I fear that I may have been engaged in tragedy. [Laughter] That is, there certainly was drama depicting a protagonist—yours truly—engaging in a significant struggle ending in ruin or utter disappointment.

For the remainder of my remarks, I'll be referring to the material that was handed out at the break.

Over the intermeeting period, indications of considerable momentum in economic activity led market participants to build in a little more near-term monetary tightening, as shown in the upper left-hand panel of exhibit 1. Market participants now appear to believe that the funds rate will peak at about 4¾ percent in mid-2006 but be rolled back slightly thereafter. The consensus Blue Chip forecast released on December 1, not shown, also indicates a median anticipation that about three more quarter-point moves are in store, but those forecasters don't have the Committee easing until early 2007.

For the near term, as shown in the upper right-hand panel, fed funds futures indicate that investors are all but certain that you will firm another 25 basis points today. They see about an 80 percent chance of another such step in January and put better-than-even odds on one more move in March.

And seemingly everyone recognizes that your statement is in play today. The financial press and market letters in recent days have devoted most of their monetary policy analysis not to your rate adjustment but to your choice of words. As shown in the middle left-hand panel, the Desk's survey indicated that most primary dealers expect that today you will modify or drop the references to "accommodative" monetary policy and that half look for the "measured pace" language to be changed or deleted. But there is little indication that market participants anticipate a structural change to your risk assessment.

A case for firming policy today is outlined in the middle right-hand panel. According to staff estimates, the economy appears to have little remaining slack, with

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

the unemployment rate in the vicinity of the NAIRU and real GDP just a fraction of a percent below the level of its potential. Moreover, the economy appears to have considerable momentum that, without further firming, could carry aggregate demand beyond the level of potential output. Such momentum might be seen as consistent with a real federal funds rate that is still relatively low. As shown in the lower panel, the real funds rate is within, but near the lower end of, the range of staff estimates of its equilibrium. With some of the indirect effects of higher crude and natural gas prices still in prospect and likely providing some impetus to the inflationary process, you might be particularly concerned about the implications of resource pressures for inflation. On the whole, though, incoming data over the intermeeting period have seemed broadly consistent with your earlier expectations that the economy and inflation would evolve in such a way as to warrant further measured firming. And financial markets have inferred from those developments and your policy communications that a quarter-point move today is a sure thing.

A more difficult question—one that could bear particularly on your statement this afternoon—is how much more tightening is likely to prove necessary. Even recognizing the substantial firming of policy to date as well as the lags in the effects of policy—an issue flagged by a number of you this morning—you may still believe that considerable further policy tightening lies ahead. If so, you might be attracted to the language of the Bluebook’s alternative C, shown in the right-hand column of exhibit 2. In the rationale section, row 2, this announcement would point to vigorous growth in the real economy and would retain the references to policy accommodation and robust underlying productivity growth. The recent strength in aggregate demand might suggest a relatively high level for the equilibrium funds rate and thus imply that policy remains accommodative. And, certainly, the remarkable figures for the third quarter could support a judgment that underlying productivity growth remains robust. In row 3, alternative C would point to “relatively high levels of resource utilization” as another reason for policy firming. In rows 4 and 5, this alternative would retain both the form and substance of the Committee’s assessment of risks from recent policy statements, including the judgment that policy accommodation could probably continue to be removed at a measured pace. Markets would be quite surprised by such an announcement, and rates would likely back up considerably.

If, however, you believe that the end of this tightening cycle is not far off—or if you simply believe that the time has come to jettison the reference to accommodative policy and some other stale language—then you may prefer the wording of alternative B. This statement would differ significantly from recent announcements. As shown in row 2, the Committee would indicate that the expansion appears solid despite the effects of the hurricanes and high energy prices, while deleting the references to accommodative policy and underlying productivity growth. In row 3, the statement would again acknowledge that core inflation has been low of late and that longer-term inflation expectations remain contained. It would express concern, however, that “possible increases in resource utilization as well as elevated energy prices have the potential to add to inflation pressures.”

The assessment of risks would be modified notably. Rather than making the arguably tautological assertion that the risks appear balanced assuming “appropriate monetary policy,” it would indicate that the “Committee judges that some further measured policy firming is likely to be needed to keep the risks to the attainment of both sustainable economic growth and price stability roughly in balance.” I emphasize “measured” because views on the Committee regarding the inclusion of this word clearly vary. As a staff memorandum indicated last week, the Chairman requests that in your comments in the upcoming round you express your preferences on this score. In your consideration of this matter, you might see “measured” as representing a needless restraint on your possible actions. But, as shown in row 5, the Committee would in effect also indicate that—as has always been the case—the risk assessment is not a commitment but a conditional expectation and that, should incoming data diverge from expectations, the Committee would commensurately recalibrate its actual and anticipated actions. Moreover, you might see little prospect that policy will actually need to move in 50 basis point steps but be concerned that, if the Committee were to drop the word now, especially in the context of the other proposed changes to the statement, market participants could conclude that you saw the potential need for such large moves.

One factor that could influence the Committee’s decision about the new assessment-of-risks language is whether you anticipate any problem adjusting that language as circumstances evolve in coming months. This appears unlikely to be a major problem. If, contrary to current expectations, more aggressive policy tightening comes to appear appropriate, the Committee could change the reference in row 4 to something like “considerable further tightening.” Or, should the end point seem to move out in time a little, the Committee could simply repeat the proposed assessment. And, finally, if and when it appears that policy has reached a resting point, the Committee could firm a final 25 basis points and change row 4 to something like the following: “Under these circumstances, the Committee judges that the current stance of policy roughly balances the risks to the attainment of both sustainable economic growth and price stability.” And at that point the “measured” terminology could be honorably discharged from service.

Given the large number of changes in the announcement proposed for alternative B, it is difficult to be confident in anticipating the market reaction that it would engender. Indeed, investors also seem to be rather uncertain about the market effect of this afternoon’s announcement, but markets are striving for completeness by offering insurance on the direct effect of your imminent policy action. Specifically, an option is being traded on the change in the 10-year Treasury yield in a two-hour window around your announcement today. The pricing of that option suggests a one-third probability that the 10-year yield will move one way or another by more than 4.3 basis points. [Laughter] For our part, the staff’s guess is that the announcement proposed for alternative B would likely boost interest rates, but not by much.

Finally, let me say a word about procedure. As you will recall, the survey of the FOMC that the staff conducted last month regarding statement language included,

among other things, questions on the scope of the Committee's policy vote—that is, whether the Committee should vote on just the directive and the risk assessment, or whether the vote should be expanded to cover all forward-looking elements or the entire statement. In preparation for a possible change, Chairman Greenspan has asked the staff to provide to the Committee early next year a memorandum that will discuss the pros and cons of alternative approaches to this issue.

Thank you. That concludes my prepared remarks.

CHAIRMAN GREENSPAN. Questions for Brian? If there are no questions, it implies that everyone agrees with everything you just said. [Laughter]

MR. MADIGAN. I expected no less. [Laughter]

CHAIRMAN GREENSPAN. It's interesting to listen to the discussion around this table today because the underlying facts are really somewhat different from what we had perceived at our last meeting. There is evidence that the economy is moving at a pace and in a direction that I don't think we would have anticipated six weeks or two months ago, especially in the context of the hurricanes. The underlying real rate of growth is really powerful.

We can see it in the United States but just as importantly, if not more so, we are beginning to see it abroad. Japan is finally getting its act together, as best I can judge. For a long period of time Japan had very poor financial results within its banking system; and while they had a nonperforming loan statistic, it certainly wasn't anything like the type that we would calculate. Therefore it looked as though the economy was a fragile one, with a banking system that was largely reliant on real estate collateral whose prices continuously plummeted. Moreover, the state of financial intermediation in Japan was highly dubious because banking is the only vehicle they have for intermediation; there really isn't an alternate means of moving savings into investment. However, the Japanese banking system has finally gotten to a point where it looks like a regular, old-fashioned banking system. Intermediation is now going on. A lot of the pieces are beginning to come together. And the reason this is important is that for a very long time we've been disregarding Japan as an international force,

even though it's the second largest economy in the world. That's because it just never moved. As a consequence, the Japanese economy wasn't an important factor in the global outlook but it now seems to be moving in a favorable direction.

And we're even getting stirrings in Europe, where Germany, though still in very serious trouble, is clearly showing some signs of improvement. Obviously, their unit labor costs have stabilized, and the impact of their very serious structural problems seems not to be getting worse.

When one looks around the world, most economies are improving. In the United States, some of the old-fashioned data, as I was mentioning to David yesterday, are showing some very strong signs. One example is that moribund industry which used to be the cutting edge fifty years ago, the steel industry. Durable goods, no matter how you cut it, are still largely made of steel, and those markets are quite strong. Scrap prices are up. U.S. Steel is booking its orders significantly far out into the future. There is buoyancy there and also in the nonferrous metals markets—markets we never used to worry about, but they still do matter.

The reason it is tough to get similar information out of, say, the high-tech industries is that while they are growing very rapidly, the dispersion from one company to the other is dramatic. In other words, if you get an industry growth rate of 15 percent, say, you might find that one company grows 30 percent for two years and then its growth goes down to 2 percent and vice versa for some other firm. So, with the technology changing so rapidly, you can't get the anecdotal readings from a lot of those companies the way you do on the old-fashioned industries where nothing changes all that much and you have a reasonably good base for making judgments.

It's hard to imagine an American economy that is as balanced as this one is. But most importantly, through all of this, we are literally seeing some resistance to the upside pressures on inflation. I find the most credible evidence on this in the forward tranches of the 10-year Treasury

note. Every time pressures begin to move up the implicit rate on the 1-year maturity being issued nine years out, when the rate gets to somewhat over 5 percent it runs into resistance.

What I think is happening relates to the discussion that I put on the table last meeting about the significant move of educated workforces into market economies from centrally planned economies—specifically the old Soviet Union, and now far more importantly China, and to a limited extent India, which still has characteristics of central planning as well. At the meeting six weeks ago, we had no data at all about the rate of change at which that transition is occurring but it's clearly a level adjustment. And the rate at which it is happening is a determinant of changes in unit labor costs and, therefore, price changes or inflation.

Some additional work has been done by Karen's group, especially on China, in trying to get a judgment about the movement of workers from the centrally planned sector of the economy to the competitive free market sector. That work indicates in rough proxies—granted, these are extremely crude data—that the rate of change has been rising for a number of years and that there does not yet seem to be any evidence that it has peaked. Now, ordinarily that would not be a great insight because the data are so poor. But if you're looking for explanations of why we're running into upside resistance on prices—every time we get strong demand and increased short-term rates, long-term rates don't want to move—this globalization of the workforce seems to be a factor.

If you look at the charts on longer-term rates today, they go up, they run into trouble, they come down. There's a ceiling out there apparently, which suggests that at least for the time being inflation expectations are clearly contained. But judging from the real-time price data, they're also soft. And they are soft around the world, not just in the United States. We're now getting price pressures in some places. In a couple of countries that are unbelievably expansionary and have irresponsible policies, we're seeing inflation rates getting up to 6 or 7 percent. The reason I raised the

issue before is that twenty years ago those rates would have been 20 percent. We're not getting any of that. So this is not a U.S. issue. It has to be a global one.

This suggests to me that we have a very unusual situation where conventional analysis tells us very concretely the following: We're running out of spare capacity; things are tightening up; and wage rates are under pressure, though not so much in the skilled area in the United States as in the lesser skilled area where we're beginning to see wage rates rise. Indeed, that is evident in the series we run using the wage and salary data in the NIPA [national income and product accounts] accounts—which of course are tied to virtually full coverage for the unemployment insurance system—and the employment and implicit hours data that come out of the establishment labor market survey. That survey reports data on average hourly earnings for production or non-supervisory workers. Using those data and the totals from the NIPAs, one can infer the average hourly wage for supervisory workers or skilled workers—that is, the 20 percent of the workforce not included in the average hourly earnings data. In the last several months, after having run well above 10 percent, the supervisory hourly wage rate has come down quite significantly, so that the ratio of wages for supervisory or skilled work to that for lesser skilled work is beginning to stabilize. And that suggests that we're beginning to get a little more pressure on lesser skilled wages and somewhat less pressure on skilled wages. These data are very interesting in the sense that they're based essentially on aggregated data, and they are something we never really looked at previously. But I think they tell us a great deal about what's going on in the labor markets, and these data involve developments that we don't ordinarily look at.

This leads us to a very interesting question as to where policy should go from here. Let's say we knew for certain that inflationary expectations were held down and that core inflation was reasonably well suppressed. The issue would still arise as to whether, with this global phenomenon,

we are constructing a situation in which interest rates are so low that we are encouraging, or indeed causing, underlying speculative activity that will create really serious imbalances in the overall system.

So we're dealing with a little more than the question of where inflation is going because, as I have mentioned previously, something that has become very evident in recent years is that overall asset prices worldwide, both equity and debt, are rising a good deal faster than product prices. And they are picking up because of—indeed, the rise in asset prices is being engendered by—the fact that interest rates are getting ever lower. Interest rates in emerging-market economies are as low as one can remember. And aside from the surprisingly high equity premium in the United States, we have very significant upward momentum in asset values. This is where the very important question of whether monetary policy should target asset prices comes in. The current situation is a very interesting case because I would say that we ought to be tightening at this particular point but not targeting the asset price increases. But it is clearly the potential for speculative activity—and its effect on asset prices—which is generating an assessment that we need to move, as far as evaluating the outlook for the overall economy.

So where I come out on all of this is that unless we move a little to tighten up a bit further, I think we're taking a risk of the system beginning to run faster than we would like. I conclude, as a consequence, that we need to move today. I think we have to indicate, as the statement for alternative B suggests, that we'll move again in January. I would hope that after the statement comes out today the March futures for the federal funds rate do not come down. I would prefer that futures rates move up a bit, even if it's our expectation—and it's a plausible expectation—that the January increase will be the end of our tightening. I can conceive of that occurring, but I think we have more here to be concerned about than just the balance of risks in the United States and the issue of whether we are

getting product price inflation or not, and I think the odds are that we are not. But we are running into the question of whether we are opening up a very significant potential for a major increase in asset expansion. Remember that when we talk about liquidity, we're talking about an increase in overall purchasing power; and common stocks as well as bonds are, in a sense, currency. And if prices of bonds and stocks go up, that will result in a very high degree of liquidity in the system, which may or may not hit on product prices. Frankly, I think it's unlikely to do so.

We have a global market and a global environment here, which I don't think we yet fully understand. In fact, I know we don't fully understand. Nevertheless, I think we need to tighten to be sure that we're safe from these speculative incursions. I believe the risks of not doing so are far greater than tightening a little bit more than probably in retrospect we would have had to do. So I think we ought to move forward.

My own personal view is that we should not drop the word "measured" from the statement because that would imply that we're really beginning to see developments out there that are moving very rapidly, and I think it's too soon to conclude that. My arguments, I think, are largely precautionary in the sense that there is something significant happening around the world that we cannot as yet fully explain, but it is one of the possible scenarios that has a high element of risk in it. And I think we have to address ourselves to that just from a risk management point of view.

So I conclude that we ought to move the funds rate target up 25 basis points, which I think is the general consensus around here, and I believe the statement that we have in "B" fulfills our objectives with regard to communicating that. I would be cautious about indicating at any time that we are about to end the increases in the funds rate, even though we may well be doing that, because that will bring mortgage rates down through the usual effect on the 10-year note. I think whatever froth there is in the housing market is becoming contained at this stage, and it's getting contained

largely because mortgage rates have moved up and are beginning to have an impact. Remember, it's not only the 30-year fixed rate but adjustable rates as well. And short-term rates have moved up quite significantly and are impacting the market.

If we can contain the presumptive housing bubble, then we have a really remarkable run out there. But the real danger, in my judgment—where I think the risks lie—is in moving rates down too soon. When I say moving down, I mean that when we stop tightening, the long-term rates are going to come down. And in my view we have to be careful about how that happens and what the impact is on the economy. Indeed, our actions are going to have an impact on the world at large because they will affect what everybody does. When I sit in the G-7 meetings, it's very evident that what the Federal Reserve does with respect to policy has a quite significant impact on the ECB and the Bank of England. The reason I know that is they tell me that. So, what we do is going to be quite important. So, my proposal is a 25 basis point increase in the funds rate target and the statement language of alternative B. Who would like to open up the discussion?

MR. HOENIG. Mr. Chairman, I support your recommendation, and I guess I can go with the language. The one thing that your comments raised in my mind relates to row 3, the rationale part of the statement, where it talks about possible increases in resource utilization. I wonder if we shouldn't have a statement that talks about the carry-on effects of past accommodative policy because that's what you're really talking about when you get into asset value issues. I'm not saying we have to do that, but that came to my mind as I listened to your comments. Other than that, I'm fine with your proposal.

CHAIRMAN GREENSPAN. Let me just respond. We have a problem if we move too quickly in changes that we make. This statement is a very significant change.

MR. HOENIG. Right. I don't disagree with you. That's the only thing that occurred to me, but I'm fine with your proposal. I think we need to keep going.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. I support your recommendation, Mr. Chairman, and I support alternative B. We've been engaged in a very constructive dialogue over the last week or two—or several weeks—about how to remove some of the elements of our statement that have been mainstays for some time. I think it's important for the rationale paragraph to end with a reference to inflation pressures remaining a concern. I think the risk statement the way it's formulated in row 4 accomplishes its task in the most sensible and straightforward way, by clearly just stating outright what we think is going to be required to maintain balanced risks.

With regard to the word “measured,” when it was originally deployed it clearly meant less than or equal to 25 basis points. I'm not quite sure it retains that strong an association to that. I think it's unlikely in the current situation that dropping “measured” would be interpreted as opening the door for a 50 basis point move, but I don't have a strong opinion one way or another. So I'm happy either way regarding the word “measured.”

Looking ahead, I think that the challenge for us is going to be how to communicate a reaction function, meaning how the pattern of incoming economic data is going to map into our choice of a policy rate. In particular, the challenge for us is going to be how to communicate about that reaction function when we get to a point where we want to rest for a meeting or two. That discussion is obviously for another day, but I think it will be important to avoid language at that time that encourages the public to place too high a probability on the rate remaining unchanged for an extended period. I say that because if the public thought we were locked in for a long time, it might undesirably

dampen the yield curve's sensitivity to incoming data. That would be unfortunate. So, those are my comments on the statement. Again, I support your recommendations.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I support your recommendation, too. You know, in the e-mail discussions that have gone on with regard to the various iterations of this statement, I think a lot of interesting ideas have come out. And they all revolve around where we are on the spectrum in terms of the question: Are we close to the end of this current tightening cycle? Has the campaign really changed? And it's a campaign with a lot more forward momentum than some of us might have agreed with.

For quite a while I have been of the view that inflation trends, though they popped up with energy, seemed moderate overall on the core rate. I've felt that low underlying interest rates were encouraging risk-taking in markets that would be inappropriate at some point. And that's been one reason why I've thought that the track we've been on now for thirteen meetings or so was the right track. I continue to believe that. And I was picking up some flavor of that in your discussion of your thinking; I have some sense of agreement with what you said, to the extent that I followed all of it.

So I'm in the camp that's perfectly comfortable with the alternative B formulation. I'm not in the camp that thinks we might need a new campaign here. I would think that some further tightening is consistent with risk minimization, given overall market psychology right now and given what we see in our forecast.

As I thought about the various formulations of alternative B that we've been presented with, I thought there were a lot of different issues at stake, not just the word "measured." One was whether we should remove the reference to "accommodative." I came out on balance that we should remove "accommodative," given that I think we're currently in a range where we're unsure that we will need a whole lot more tightening and, therefore, we're probably less accommodative than we were two or

three meetings ago. Removing “accommodative” could be taken in the other direction, though. By taking out “accommodative” markets could say, “Aha! They are on a campaign upwards.”

Regardless of where they think the current sense of policy is, they could believe that we might want to be even more aggressive. But I think the rest of the statement moderates that possibility sufficiently that taking out “accommodative” is consistent with my thinking.

Then there were some other alternatives that came up in the discussions back and forth. We had been using productivity growth on the demand side as a demand accelerator. You can think of the way we see productivity growth currently as an expansion of supply and, therefore, a cushion against inflation. And a couple of people did suggest that. To me that had some appeal. I’m not going to suggest modifying the statement online or in the meeting here, but if we continue to see an expansion of productivity moving forward and it is a cushion against inflation, this is something we might want to think about as a factor to add to our assessment of the current situation.

Should we use the word “some” to modify “measured policy firming”? A lot of people thought we should, and it ended up getting into alternative B. I think that’s the right way to go. Should we retain “measured”? I could live with “measured” being there; I could live with taking it out. With the use of “some,” I think it’s a little easier to keep it in because to me it has less of a feeling that “measured” means more than a couple additional policy tightenings.

And finally, the statement uses “likely” in the reference to further tightening moves—that “some further measured policy firming is likely to be needed.” That may be a little more positive about the number of further moves than I’m comfortable with. I can go with it. I could also go with something like “some further measured policy firming may be needed,” which I think was President Fisher’s formulation.

So all in all, I'm in agreement. I think we could go either way on five or six of these different words. Taken together, the proposed language says what I'd like to say. That is, it says we're at a point where there's enough uncertainty about whether we're accommodative or not that we can take "accommodative" out. And we're sending a message that we may tighten a couple more times, but we're certainly going to look at the data and weigh both of our underlying goals. So that's a long-winded way of saying I agree with you. [Laughter]

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I guess I'm going to be an outlier here. Let me start by first saying that I agree with the 25 basis point increase. As for the language, I think everyone in the room agrees that we don't know at this time what the path of policy is going to be next year. The data and the forecasts are going to determine that. We've said this many, many times. So to me the objective of the statement is to give us maximum flexibility at this point and not lock us into one course of action or another. It should not give the impression that we're necessarily very near the end of the tightening cycle.

I agree with your comments in that I think the risks are skewed toward the need for more tightening, and I think we have to be very careful at this point for the reasons that you mentioned. To me alternative B in the Bluebook goes much of the way toward accomplishing this. I think it was artfully put together.

Now, to my ear—and I emphasize "to my"—the phrase "some further measured policy firming" might be interpreted as implying that the sequence of rate hikes is nearly over. There's a possibility that it's nearly over, but I don't think there's any assurance that it will be. So my preference is to just say "further policy firming" without either "some" or "measured." But of the two words, if we take out one, I would take out "measured" at this point. "Measured" is now interpreted

in a way that I think is different from what we originally intended. Now its primary meaning is only a 25 basis point increase at the next meeting, and according to Vincent's memo, the market seems to think there's a very high probability of two more increases. So in my judgment, since we're now making major changes in the statement, this is a good opportunity to remove the term "measured." I think it has outlived its usefulness.

As of today, we will have increased the fed funds target thirteen times in a row by 25 basis points. So our statement signals further policy tightening, certainly, at the January meeting. And it's difficult for me to understand, after we've moved the funds rate up thirteen times in a row by 25 basis points how market participants would expect us to increase it in January by more than 25 basis points, even without the term "measured" in there. So in my judgment, this is the ideal time to take it out.

CHAIRMAN GREENSPAN. If I could, I'd like to respond to that just to give you the other side of the argument. The fact that we are making a significant change in the statement is the reason why they might conclude that we're also changing the 25 to 50, and I think that we want to keep ourselves flexible in that regard. In my judgment, the risk of that interpretation getting into the marketplace and causing a much stronger response than we'd ever expect is high. And I'm not sure why we can't remove "measured" in January, for example. In other words, there's no rush to phase out the statement. By March this statement will be long since gone, having had—how would you put it?—a respectable interment or whatever. [Laughter] But I think we're underestimating the size of the change we're making here; we're so used to markets not responding at all. I think there's a little more tentativeness out there. People are not quite certain, which means that there is a greater chance of a strong market response. Or perhaps more accurately, there is the chance that the market will respond in one way first and then 15 minutes later will go wholly in the other direction. We've seen that type of reaction in the past. We haven't seen that recently.

I'm a little uncomfortable about that phenomenon in this context. As you say, our knowledge at this point is a little sketchy in terms of what the market reaction will be. But I can go either way on the word "measured" myself. I just think it's better to keep it in now and then take it out later.

MR. MOSKOW. Well, I've thought about both sides of this a great deal, and I understand that argument. I just think we're at the point where it's better to get all the changes behind us, so I'd do it now. That's a judgment call.

CHAIRMAN GREENSPAN. If you can guarantee that the market will—[Laughter]

MR. MOSKOW. If I could guarantee that, I wouldn't be here! [Laughter]

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I agree with the recommendation to raise the federal funds rate target by  $\frac{1}{4}$  percentage point, and I can accept the language in alternative B as it is drafted here.

If I were the policy czar on this, I would make an argument to take out "measured" on the grounds that we want to at least alert market participants to the prospect that we're getting close to ending the more or less automatic  $\frac{1}{4}$  percentage point increases, because we're getting close to having removed all of the policy accommodation that we need to remove. President Moskow made the other side of the argument for removing "measured," and I took your comments as implicitly working in the same direction. So I think "measured" ought to come out, if not at this meeting, soon; it seems to me that it certainly has about outlived its usefulness.

I would also, if I had my druthers, replace "likely" with just "may" or "may well." But as I said, I can accept this language as drafted, because I don't have any special insights as to whether market participants are going to like one word better than another. But of course, however the market

happens to react, the relatively prompt release of the minutes will help because the market will get a more complete picture of our thinking within a relatively short period of time.

CHAIRMAN GREENSPAN. President Fisher.

MR. FISHER. Mr. Chairman, I listened very carefully to what you said. In 1997, I sold my money management business because I figured I could no longer beat the house. For 23 years I was a market operator, so I'm very sensitive to the power of markets and the issue you raised, although I think it's a very risky business for the FOMC to discuss how monetary policy might impact asset prices. Yet you're right in terms of the power, the liquidity, and what that's doing to affect real economic behavior, so I look forward to that discussion.

In thinking about this statement, I want to vote for the  $\frac{1}{4}$  point increase announced in the first sentence. I think the one-sentence statement in row 2 in alternative B says all that needs to be said—the economy is solid, period. That's good news. In row 3, I would prefer to say why core inflation has stayed relatively low, because we talked about it at this table. It has remained low for two reasons—because of competitive pressures and still robust growth in productivity, and I think we ought to insert that. Those are the facts, and we just talked about them at length. And I suggested that kind of language when I sent in my note.

In the wording of the assessment of risks, I think there is an interesting trade here. We're taking out "accommodation," which is a signal. One could make the argument to remove the word "measured." I respect the arguments that were just made. To mitigate the operative word "likely" I think we could achieve the objective by just saying "further measured policy firming may be needed" rather than "is likely to be needed." That leaves us plenty of options, and I can honestly say that I feel it may be needed; I cannot honestly say it will likely be needed. But then, again, I will not have a vote next time. Thank you.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I support the 25 basis point increase. In my view, leaving “measured” in is wise because it provides continuity with past statements. Also, I think taking it out would be read as a hint to the market that we would seriously consider a 50 basis point increase. And I don’t think that’s necessary or desirable.

I am inclined to believe that we should replace “is likely to” with “may,” and my argument goes this way. This is a chess game, and we have a bunch of moves ahead of us here. In terms of the likely policy adjustment in January, I’m not willing to bet my house—or even the equity in my house—but I am willing to make a \$100 even-money bet that we’ll want to raise the funds rate another 25 basis points in January. But as we go out further and look at March, I’d probably not make a \$100 bet but a \$30 bet. And for May maybe only a \$10 bet. And the question is: When is the best time to replace “is likely” with “may”? If we do it now, we can pretty much recycle the same statement, if we want to do so, whereas if we were to substitute “may” for “is likely” in January or March, the market will ask what kind of signal that is. I think the reading would be: “They are going to pass and not raise the funds rate next time.” That may not be the signal we want to send. On the other hand, if we leave in the words “is likely,” at some point we’re going to be faced with the problem of wanting to pass on a rate increase but having said in the previous statement that an increase “is likely.” So that would be my argument for substituting “may” for “is likely” at this meeting.

CHAIRMAN GREENSPAN. The only thing I would say in response to that is that if we change “is likely” to “may” at this meeting, we’re going to get a bond market rally, which we’re not going to find helpful in containing the speculation in the housing market. So I think it’s more an issue not of what our intentions are but how the market is likely—I shouldn’t use the word “likely”

[laughter]—to react. What we're trying to do essentially is to get a soft landing coming in from the top. Markets tend to over-respond, as we've seen too often. Saying "may" implies that we may not move in January, and that will bring the structure of the yield curve down quite measurably. And I think that will open up house price speculation, which will create problems for us. In my view, it is perfectly credible that we may choose to make January our last increase. And if we do, as Brian said, we have the sentence in row 5 there. That's its purpose.

Look, if this economy slows down significantly, the markets will adjust before our next meeting, and whatever we say will be almost irrelevant. That's what we're dealing with. It's essentially playing the short-term game and trying to guess what the 10-year note is going to do relative to what we're doing. I happen to think it's a risky activity, even though it's perfectly credible that January could be our last boost in the funds rate.

MR. POOLE. I don't disagree with that, and that's why I said I would be willing to make a substantial bet that we will want to increase the funds rate in January. And I think it would be unfortunate to send a signal otherwise. But I am worried about the sequence of these statements and the advantages of making minimal changes in order to avoid misleading the market. What I'm saying is that there is a tension between those two objectives.

CHAIRMAN GREENSPAN. Well, I think we're all in agreement that we want to get out from under this language as soon as feasible and with as little disruption as feasible. And we're guessing in a lot of areas. We just have no way of anticipating certain things. We're all going in the same direction. The question is how fast we get there. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. First, I accept your recommendation for a 25 basis point move. On your analysis of asset prices, I think it is notable that over the last ten years—or more than ten years—we've had a great moderation in both GDP and also inflation, but at the same

time, as you point out, asset volatility hasn't come down. Actually, the price level with respect to equities has gone up. This supports your thought that going forward we're likely to be talking about asset prices more, without targeting them.

To the point of today's discussion, I rather like alternative B, after the back and forth, as it sits on the page. I think it is no longer fair to say that policy is accommodative. I believe we are close to or well into the neutral range. In my view, most of the data that we've seen tend to support that notion. If we take the reference to accommodative policy out, I think we do need to consider what is appropriate for section 4, the forward-looking language. And, in particular, the phraseology "some further measured policy firming is likely to be needed" strikes me as getting just the right balance, as I think you were saying as well. The word "measured" I think has come to mean 25 basis points, and I believe it's important to hold on to that notion if we take out "accommodative."

Secondly, on the issue of how much more we have to do, I tend to think it may be one or two more moves, similar to the expectation built into the Greenbook and the market, which strikes me as appropriate in supporting the concept of "some further." So, even though it's a mouthful, I like the "some further measured policy firming."

On the "may" versus "is likely," I think it's important to hold on to "is likely" because that's actually our best judgment—that further tightening is likely. If we get into January and we are much less certain, then we can dial it back to "may." But I think "is likely" is a more accurate signal and I would support that wording.

And finally, though people don't focus on it too much, we have the escape valve that you just talked about, the last sentence. We've gone through lots of iterations of this statement back and forth. One of our colleagues feels as though he's been in a great tragedy or a comedy of errors. [Laughter]

But I think we've ended up in a reasonably good place, and I'd like to stick with the language of alternative B as written, as you proposed.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. First, let me say that I support the 25 basis point increase today. And I give my sympathy to Brian, who has heard our many different viewpoints in the last week. I think he has done a good job of trying to get all our ideas out here in a reasonable balance. My initial feeling was that I really didn't want to keep the word "measured" in the statement; I wanted to drop it as part of this change. But for the reasons everybody has suggested, I can accept the wording in alternative B as it is now.

Mr. Chairman, you talked about some of the risks to the long-term side of the market. I think that is a serious concern because so much of the pricing these days seems not to involve looking at the longer-term risks, and it's so critical to what is currently driving investment and risk-taking. And for that reason, I guess I'd like to leave the words as they are now. But the big change that I would like to see is a move away from forward-looking language as we get to the point where there is more uncertainty about future policy. It was easy for the last thirteen meetings to say, "We're on a trend; the funds rate is way too low and we have to get it back up." So it was easy for us to signal ahead. But as we signaled ahead, the market looked at what we were saying we were going to do as opposed to what the data were saying we would do. We, in effect, have taken the risk away from the market, especially at the long end, because market participants think we're going to signal ahead of time and they will have time to get out of their long positions.

In my view, we should go back to structuring section 4 to say basically where we think the risk is. Then I'd take the second part of that sentence and put it down in section 5, because it's still a tautology to me. It still says we want to attain the right balance. Well, there's no way any of us

around this table is going to say that we're not going to follow the mission of the Fed. So if we're going to put in a tautology, I'd put it in part 5. And in part 4 I'd just indicate our assessment of the risks—that we think the risks are balanced or that the risk to growth or for inflation is greater. That would give the markets the message that they need to go back to looking at the data to figure out what we're going to do, rather than our laying out for them what our next policy moves are going to be. As we get to the cusp, that risk perspective is really important. We saw when we turned from the bottom and rates were heading back up again that it disrupted the markets. But we need the markets to be ready to absorb that kind of risk because, as we sit around this table, we do not know exactly how we're going to engineer getting out of this pattern of moving 25 basis points at each meeting. And I think the way to do it is to focus on where we see the risks and to stop giving any kind of signal on what our likely moves are going forward. I would like to see that happen at the next meeting.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. First of all, I support the ¼ point increase. We have passed over fairly quickly, except for a couple of instances, the impact of removing the “accommodative” language, which I think is very significant. And I am reminded, based on past experience, that when we make multiple changes in our statement, there is a greater likelihood that the market will respond in ways that we hadn't intended.

On the decision of whether to include or exclude the word “measured” from the language, initially I was ambivalent. But after hearing the discussion, I wanted to make sure that if we removed it, we also had language that took off the table the possibility of a 50 basis point move. So I was intrigued by Brian's suggestion of—I don't know what to call it—a gentle jettisoning of the term, and I think on balance I am in favor of keeping it. So I am supporting both the ¼ point move and alternative B as written.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Mr. Chairman, I support the proposal to raise the fed funds rate 25 basis points. As to the language itself, I supported the first change we had to alternative B. Since that time, we've played around, if you will, with some of the wording, and I worry a little about wordsmanship by 19 people over time. I'm not sure how stable that is. So, rather than being one of the 19, I'm very happy with the language as it stands.

On the issue of "measured," I came into this Committee meeting somewhat reluctant to retain that word in the statement. I was taken by your explanation of the likely market reaction and, on further thought, I support retaining that word as well. So I'm quite happy with where we are.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support your proposition to tighten policy by 25 basis points today. And I agree with you that we'll probably have to move in January, with a good deal of uncertainty about where we'll go after that. If I could design the market reaction to our announcement—which I know from long experience I can't—I would leave rates about unchanged when we're finished, with some probability of tightening past January, but not 100 percent. Like you, I think we're at a point where the momentum in demand and the level of resource utilization are such that if we're going to make a mistake, we ought to err a bit on the side of going too far rather than stopping too soon.

Exactly what the role of asset prices is in that is a much more difficult issue. I certainly see asset prices playing through to the macroeconomic situation, as you said—in particular, housing prices and the way they have stimulated not only residential construction but consumption more generally. And as I said in my remarks, I think we need to see some sign that that market is cooling off. So, in that regard, I agree that asset prices are critical to the outlook. Whether I would worry

about imbalances and put a little more emphasis on them, aside from the macro outlook, I think is a much more difficult question.

In terms of the language, despite my expansive reading of the word “accommodative” at the last meeting, I support its deletion from the announcement and the wording of alternative B. I don’t think we have to go to a restrictive policy in this firming cycle, which I would define as a policy designed to cause the economy to run below potential in order to reduce inflation. I think I’ve just been reinforced in that judgment by the recent data on costs and prices. But we don’t need to get into linguistic hair-splitting to make our point about what we intend to do. I support taking attention off of a precise definition of “neutral,” which remains a shifting and elusive quarry. And that was inherent in the use of the word “accommodative.”

In terms of the wording of the statement itself, I like alternative B as it is currently worded. I agree with you that moving from “is likely” to “may” would signal that we are about to stop, or that we think the odds are at best 50/50 that we’ll move again, and we would have a heck of a rally in financial markets. And as I said, I’d prefer to leave markets unchanged at the end of this. So I would go with “is likely” at this point, given my expectations, and save moving to “may” for the January meeting, if we think the odds are 50/50 for March.

As for the word “measured,” I would prefer to keep it in the statement. To me, it means that we think we’ll be moving in 25 basis point increments, and I do believe that’s our intention. I’d be concerned that omitting it would be interpreted as an indication that the Committee would be looking at the possibility of moving in 50 basis point increments, and I don’t think that’s what we intend to do. In the phrase “measured pace,” I thought it was the word “pace” that tended to carry the concept of a series of moves, rather than the word “measured,” which, to me, meant 25. So I’m in favor of dropping “pace” and keeping “measured.” Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. I support your recommendation of a 25 basis point increase in our fed funds rate target. I can also accept the language in alternative B. Like others, though, I came to the meeting preferring to remove the word “measured.” But I didn’t see removing the term “measured” in the way Brian did—that it meant markets might think we would go up at a faster pace of 50 basis points. I thought that its removal would give us more flexibility to stop at a certain point. It’s interesting, in listening to this conversation today, that we all have different interpretations of what it would mean. So I am just going to go with your guidance. Nevertheless, given what I know today, I’m leaning to the view that we’re going to have to stop at some point soon versus having concern that we’re going to have to do more. But again, given what I’ve heard today and given your recommendation, I support the language as written in alternative B.

CHAIRMAN GREENSPAN. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I support a 25 basis point increase today and I also support the language in alternative B. It seems to me that the framework in “B” maintains its existing form and also offers forward-looking guidance. I think we’ve had a very constructive process, much to my surprise, in the way 19 people have taken turns at drafting a statement that has evolved really quite nicely. The statement has the potential to evolve further next month and in March; we’ve already discussed ways in which it can evolve—by eliminating “some,” changing “is likely” to “may,” or possibly excluding “measured.”

For today, I guess I’m comfortable keeping “measured.” I think there are arguments on both sides of it. I think it is important to signal that we have no intention of doing something more aggressive than a 25 basis point move. On the downside, as President Pinalto said, when you combine “measured” with “is likely” and simultaneously remove “accommodation,” markets may

conclude that we have in mind at least two more steps, maybe more. And potentially removing “accommodative” may signal that we intend to go beyond neutral into a restrictive stance.

But it’s really hard to interpret how the markets are going to react to this. And frankly, I think this statement comes as close as we can get to doing what I would like to see today, which is to essentially validate the expectations that are currently in the markets and in the Greenbook. Those expectations are that we are highly likely or almost certain to move another 25 basis points next time and that what we will do in March and beyond is an open question. I think this is not a statement that is likely to bring long-term rates down, although we will see shortly.

On the issue of asset prices, I would simply second the comments that Governor Kohn made about them. It’s a topic for greater discussion in the future.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I too support the recommendation for a 25 basis point increase. I’m sure that the process we went through on revising the language in the statement was frustrating to the staff but I actually found it both interesting and constructive. When we’re making changes as significant as we are today, I think there should be some way for all of us to contribute to the ideas and to see each other’s ideas. So again, as frustrating as I’m sure it was, I found it constructive.

There’s a lot to like about alternative B, and I support it as well. I’ll limit my comments just to the words in play. Actually, my comments on the draft statement language last week indicated a support for leaving “policy accommodation” in. My thinking was—and I still believe this—that we really haven’t moved through whatever the neutral point is to pure tightening. I have a little bit of concern that markets will interpret it that way and assume that we’ve gotten behind and, therefore, are ratcheting things up. But I like Brian’s comment that there comes a time to honorably discharge

words and phrases from service. And since it's so hard to measure, and even more difficult to talk about, I think it is time to get that out of the statement.

I actually think there's no cost to leaving in "measured" in row 4. Although I think the probability is very small of its removal being misinterpreted as an opportunity for us to move faster, to me it's much better to leave it in. I have a strong preference for leaving the next line as it is, with "is likely" instead of "may." I think that's where we are, and I'd much prefer that the wording stay that way. I assume we're going to have other substantial changes to the statement in coming months. I just hope we can find a way either before the meeting or during the meeting to have a chance to share our views and see each other's ideas, as messy as it is. I think we come out in a better place when we do that. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Mr. Chairman, I support your recommendation to move 25 basis points and I support the language in alternative B. I think it's a nice, balanced formulation, and I do believe it's the best way to leave expectations roughly neutral.

I think we view the probability as very high that we're going to need to move in January and that March is maybe an even bet. That seems about right. This probably introduces a little bit more uncertainty into the signal about monetary policy than has been the case before, but I think that's desirable. It's a fairly flexible formulation and allows us to adapt reasonably easily going forward. I agree that "may" would carry too much risk of taking out a good deal of the tightening that is now built into the market, and, therefore, I don't think it would be desirable.

The problem with "measured," of course, is that in our discussion there is so much dispersion on how we interpret the implication of "measured" today that it's a little hard to justify retaining it. Nevertheless, I'm comfortable retaining it because it has two virtues that are not necessarily

inconsistent. One is that it does keep a bit of a cap on expectations about how much and how fast we need to move, and I think that's probably desirable now. The second implication it carries is the sense that we may be facing two more moves rather than just one. Again, I think that's desirable now, too; so, on balance, it makes sense to me to keep it.

Also, I just want to echo what many of you have said in that I agree that this was a pretty good process. Committees sometimes have a bad name. We were a group of seventeen people this time and I thought the process was quite good. I think the language got better through the evolution of this statement, and that makes me more hopeful. Thank you.

CHAIRMAN GREENSPAN. We are going to be voting only on the directive and the assessment of risks; therefore, we needed a second view of the Committee on the statement itself. It turns out that the critical word there that has been in dispute, and which Brian was unable to resolve, was the word "measured." And it had the advantage of not changing the rest of the statement either way—whether it was in or it was out. In the event, a significant majority seems to be in favor of leaving "measured" in. Hence, we will vote on the directive and the assessment of risks, and if that gets an affirmative vote, we will presume that the language for the statement shown under alternative B is acceptable as well. So, why don't you read "B" and the assessment of risks.

MS. DANKER. I'll be reading the directive wording from the Bluebook and the assessment of risks from alternative B in exhibit 2 from Brian's presentation. "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 4¼ percent." And the wording for the assessment of risks: "The Committee judges that some further measured policy firming is likely to be needed to keep the risks to the

attainment of both sustainable economic growth and price stability roughly in balance. In any event, the Committee will respond to changes in economic prospects as needed to foster these objectives.”

CHAIRMAN GREENSPAN. Call the roll.

MS. DANKER.

Chairman Greenspan	Yes
Vice Chairman Geithner	Yes
Governor Bies	Yes
Governor Ferguson	Yes
President Fisher	Yes
Governor Kohn	Yes
President Moskow	Yes
Governor Olson	Yes
President Santomero	Yes
President Stern	Yes

CHAIRMAN GREENSPAN. Okay. Let’s move to recess. I’d like to ask the Federal Reserve Board members to come to my office to respond to requests for changes in the discount rate.

[Recess]

CHAIRMAN GREENSPAN. The Board voted to approve the requests of all twelve Reserve Banks to increase the discount rate to 5¼ percent.

The last item on the agenda is to confirm that our next meeting, and my last, is January 31<sup>st</sup>. See you all for lunch.

END OF MEETING