

**Meeting of the Federal Open Market Committee  
March 15, 2011**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., starting at 8:30 a.m. on Tuesday, March 15, 2011. Those present were the following:

Ben Bernanke, Chairman  
William C. Dudley, Vice Chairman  
Elizabeth Duke  
Charles L. Evans  
Richard W. Fisher  
Narayana Kocherlakota  
Charles I. Plosser  
Sarah Bloom Raskin  
Daniel K. Tarullo  
Janet L. Yellen

Jeffrey M. Lacker, Dennis P. Lockhart, Sandra Pianalto, and John C. Williams, Alternate Members of the Federal Open Market Committee

James Bullard, Thomas M. Hoenig, and Eric Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English, Secretary and Economist  
Matthew M. Luecke, Assistant Secretary  
David W. Skidmore, Assistant Secretary  
Michelle A. Smith, Assistant Secretary  
Scott G. Alvarez, General Counsel  
Nathan Sheets, Economist  
David J. Stockton, Economist

James A. Clouse, Thomas A. Connors, Steven B. Kamin, Loretta J. Mester, David Reifschneider, Harvey Rosenblum, Daniel G. Sullivan, and David W. Wilcox, Associate Economists

Brian Sack, Manager, System Open Market Account

Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors

Maryann F. Hunter, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors; William Nelson, Deputy Director, Division of Monetary Affairs, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Charles S. Struckmeyer, Deputy Staff Director, Office of the Staff Director, Board of Governors

Lawrence Slifman and William Wascher, Senior Associate Directors, Division of Research and Statistics, Board of Governors

Andrew T. Levin, Senior Adviser, Office of Board Members, Board of Governors;  
Stephen A. Meyer, Senior Adviser, Division of Monetary Affairs, Board of Governors

Joyce K. Zickler, Visiting Senior Adviser, Division of Monetary Affairs, Board of Governors

Michael G. Palumbo, Associate Director, Division of Research and Statistics, Board of Governors

David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Andrea L. Kusko, Senior Economist, Division of Research and Statistics, Board of Governors

Randall A. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors

Blake Prichard, First Vice President, Federal Reserve Bank of Philadelphia

Jeff Fuhrer and Robert H. Rasche, Executive Vice Presidents, Federal Reserve Banks of Boston and St. Louis, respectively

David Altig, Richard P. Dzina, Ron Feldman, Craig S. Hakkio, Richard Peach, Glenn D. Rudebusch, Mark E. Schweitzer, and John A. Weinberg, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, Minneapolis, Kansas City, New York, San Francisco, Cleveland, and Richmond, respectively

**Transcript of the Federal Open Market Committee Meeting on  
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CHAIRMAN BERNANKE. Good morning, everybody. I would like to begin by welcoming John Williams to the table. John has been at 18 previous meetings, so it is not a new experience for him, but this is a new position. We welcome you, and wish you the best of luck.

MR. TARULLO. Doesn't he have to sing? [Laughter]

MR. FISHER. The FOMC song; it's a great one. [Laughter]

MR. WILLIAMS. I've been around long enough to know the tune: "It's a Small World." [Laughter]

CHAIRMAN BERNANKE. Governor Warsh is not with us today, as you can see. He'll be leaving at the end of the month, so this would have been his last meeting. We will, of course, miss Kevin very much. We will have an opportunity at the April meeting to honor him and say good-bye.

Our ever-alert staff has informed me that today is the 75th anniversary of the FOMC. The first meeting was in March of 1936. This is meeting number 725. If we keep going, we will eventually get it right. [Laughter] We would like to celebrate, but somebody has taken away the punchbowl. [Laughter] However, there will be a "Happy 75th Anniversary" cake at lunch today, so you'll understand where that is coming from. Without further folderol, item 1 is financial developments and open market operations. Let me turn it over to Brian Sack.

MR. SACK.<sup>1</sup> Thank you, Mr. Chairman. Investors generally read the incoming economic data over the intermeeting period as somewhat better than expected. However, the escalation of political turmoil in the Middle East and North Africa (MENA) and, more recently, the devastating earthquake and tsunami in northeastern Japan weighed on market sentiment, leaving many asset prices relatively unchanged since the last FOMC meeting.

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

As shown in the upper-left panel of your first exhibit, the spread of political unrest across the MENA region resulted in a sizable spike in oil prices, as investors reacted to the disruption to oil supply from the region. Oil prices ended the period more than 15 percent higher than they were at the time of the last FOMC meeting. Nathan Sheets will provide a more detailed discussion of these developments; I will instead concentrate on their implications for U.S. interest rates and asset prices.

The primary effect of these events on U.S. asset prices has been to raise concerns about growth prospects. Indeed, on the days of the five largest increases in oil prices over the intermeeting period, which were all associated with key geopolitical developments, equity prices fell a cumulative 4 percent, and the 10-year Treasury yield declined nearly 15 basis points.

However, the concerns about economic growth arising from higher energy prices were counterbalanced by the incoming economic data over the intermeeting period. As noted earlier, economic data releases have generally come in stronger than investors' expectations, as suggested by the economic news index shown to the right. On balance, the combination of energy price developments and the incoming data appears to have left investors' views on U.S. growth prospects about unchanged.

Given that assessment, there was little revision to the expected path of the federal funds rate, as shown in the middle-left panel. At shorter horizons, these expectations appear firmly anchored by the "extended period" language in the FOMC statement. Moreover, the Chairman's semiannual monetary policy testimony and speeches by other FOMC members were read by market participants as emphasizing a commitment to the current stance of monetary policy, further anchoring expectations at those horizons. At longer horizons, policy expectations have been responsive to incoming information but ended the intermeeting period only slightly higher.

The small upward shift in policy expectations at longer horizons showed through to changes in Treasury yields. As shown in the middle-right panel, Treasury coupon yields ended the period modestly higher than their levels at the time of the last FOMC meeting.

Of course, the recent surge in energy prices also has consequences for the inflation outlook priced into financial markets. This surge is taking place against the backdrop of the significant gains in broader commodity prices that has occurred since last summer. Accordingly, it may be particularly important at this time to monitor measures of inflation expectations.

As shown in the bottom-left panel, the five-year breakeven inflation rate derived from TIPS rose sharply over the intermeeting period, extending the strong upward trend that has been in place since last August. This trend reflects an upward revision to the intermediate-term inflation outlook that has been driven by growing confidence in a cyclical recovery, evidence that core inflation rates have bottomed out, and the substantial rise in energy and food prices.

In contrast, the five-year, five-year forward breakeven inflation rate has stabilized in recent months at levels that are within its historical range. Thus, according to this measure, the factors that are boosting the inflation outlook over the intermediate term are not leading to significant longer-run inflation concerns among investors. Surveys of market participants also do not show a significant shift in perceptions of longer-term inflation, though the most recent survey reading of inflation expectations among households showed an unexpected increase, as Dave Stockton will discuss.

The panel to the right takes a closer look at the intermeeting increase in the five-year breakeven inflation rate by decomposing it into the changes in the implied one-year breakeven inflation rates at various horizons. As can be seen, the increase in the five-year rate was driven primarily by a very steep rise in the breakeven inflation rate over the next year. This increase in large part reflects the direct effects of higher food and energy prices on headline CPI. In contrast, the rise in breakeven inflation rates at horizons several years ahead has been limited, suggesting that little of the anticipated spike in headline inflation is expected to pass through to inflation over the intermediate term.

The effects from energy prices and economic data were also apparent in other asset prices—the subject of your second exhibit. Broad equity indexes finished the intermeeting period about flat, on balance, despite several downdrafts associated with developments in the MENA region. In recent days, the market has also had to digest the news of the earthquake and tsunami in northeastern Japan and the resulting problems at their nuclear plants. Those events initially resulted in only a modest pullback from risk in U.S. financial markets, but, unfortunately, the situation in Japan has continued to deteriorate. A further response in U.S. financial markets is expected today following the dramatic plunge in Japanese share prices that occurred overnight. Overall, the developments in the Middle East and Japan have left investors with a perception of greater downside risks to the outlook.

Of course, the broader story in equity markets has been the robust rally since last August, with the S&P index having gained about 25 percent over that period. The staff continues to believe that this rally was reasonable from the perspective of the fundamentals. In particular, the increase in share prices has been driven by a revision to expected earnings growth as economic prospects have improved. While the increase has also been supported by a decline in the equity risk premium, the staff's measure of this premium still remains sizable, as shown to the right.

The more favorable sentiment towards risk since last August has also been reflected in credit markets, but the story in this area is somewhat more complicated. As reviewed in the staff memo on asset valuations, some developments in credit markets bear watching at this point.

The areas that are drawing the most attention in this regard are the corporate bond and leveraged loan markets. Pricing in these two markets has become more aggressive, as shown in the middle-left panel, and the terms of many transactions have loosened, as investors become more willing to assume risk. Nevertheless, most

valuation models indicate that pricing is not excessive at this point, and the terms of most deals are still closer to those seen in the first half of the 2000s than those of the bubble years. In any case, we will continue to watch these markets closely, as there is now less room for the current trends to continue before we reach a worrisome point.

Another credit market segment that has attracted some attention is commercial mortgage-backed securities. Sentiment towards this sector has improved further over the past several months. This shift is reflected in the ongoing narrowing of credit spreads on these securities and the pickup in the flow of new CMBS deals. As shown to the right, most dealers expect issuance to reach about \$40 billion this year. Moreover, anecdotal evidence suggests that many investment banks are investing in their CMBS desks—a further indication that they expect activity to continue to improve. While some observers have raised concerns about whether the pricing and terms of new deals are already getting too aggressive, most see this trend as appropriate and the asset class as still modestly cheap.

Overall, the staff's assessment is that conditions in credit markets, while more aggressive in some areas, are not obviously out of line with fundamentals or historical norms. To a large extent, loosening credit conditions have been driven by investors' assessment that the prospects for economic growth are improving.

In foreign exchange markets, the dollar continued to weaken against other major currencies over the intermeeting period, as shown in the bottom-left panel. This move in part reflects that monetary policy prospects in several advanced economies have shifted more aggressively in the direction of tightening than those in the United States. Indeed, the market now believes that an increase in the policy rate by the ECB is imminent and that the Bank of England will follow suit soon thereafter. Reflecting those expectations, two-year sovereign yields in those countries have moved up to a greater extent than domestic Treasury yields in recent months, as shown to the right. For the ECB, the shift in the policy outlook has taken place despite ongoing strains in peripheral countries. The announcement over the past weekend of pending changes to the European Financial Stability Facility prompted some narrowing of peripheral sovereign debt spreads, but they still remain quite wide.

Your third exhibit turns to monetary policy operations. As of last Friday, the Desk had completed \$310 billion of the \$600 billion of intended asset purchases announced in the November FOMC statement, bringing the total amount of domestic assets held in the SOMA to \$2.3 trillion, as shown in the upper-left panel. Our purchases for portfolio expansion are currently running at a pace of \$80 billion per month, which puts our asset holdings on a straight trajectory to around \$2.6 trillion by the end of June. In addition, the Desk continues to conduct purchases associated with the reinvestment of principal payments on our holdings of agency debt and mortgage-backed securities. Those reinvestments will total about \$22 billion over the next month, but we expect them to decline in subsequent months.

The monthly flow of total purchases from the program is shown in the upper-right panel. The figure also includes the projection of purchases through September under

the assumption that the \$600 billion of intended purchases is completed by June and that reinvestments continue thereafter. As can be seen, this approach will produce an abrupt decline in the pace of purchases beginning in July.

Given that prospect, an issue that has been widely discussed in financial markets in recent weeks is whether the FOMC will taper its asset purchases as the end of the program approaches. A tapering strategy was employed in the earlier round of asset purchases, with Treasury purchases slowed over a two-month period ending in October 2009 and MBS purchases slowed over a six-month period ending in March 2010.

One of the reasons behind the decision to taper purchases during the earlier programs was to allow the markets to transition smoothly to our absence. At that time, we faced greater uncertainty about whether the stock or flow of our purchases drove the effects on market pricing, and hence there was some concern that abruptly ending the flow of our purchases could cause the yields on those assets to move up sharply. However, the experience from that period gave us greater confidence in the stock-based view of the program's effects. Indeed, even as the flow of MBS purchases was brought to zero over the tapering period, the pricing of MBS relative to Treasury securities did not change much, as shown by the yield spread in the middle-left panel. This pattern suggests that the Treasury purchases in the current program could end fairly sharply without causing a significant rise in Treasury yields, as long as the expected stock of our holdings remains steady.

Another reason to expect flow effects to be limited is the depth and liquidity of the Treasury market. The Treasury market continues to see a considerable amount of trading activity, as shown in the middle-right panel, and other measures of market liquidity look decent. In general, our purchases have not dominated market activity to the extent that our MBS purchases did, and hence it should be less challenging for the market to adjust as our purchases step down.

Overall, these considerations give us greater confidence that the FOMC can reduce its purchases quickly without causing a significant increase in the term premium or a notable worsening of market functioning. Market participants appear to have reached the same conclusion, as they generally do not expect the FOMC to taper its purchases. Indeed, in the primary dealer survey conducted by the Desk, 16 of the 20 dealers indicated that they expect the FOMC to complete the \$600 billion in purchases at the end of June, suggesting that they do not expect any tapering.

Last, I wanted to provide a brief update on the outlook for net income from the SOMA portfolio. This income will be the primary driver of the pattern of remittances to the Treasury from the Federal Reserve, although remittances will also be determined by other sources of income, operating expenses, dividends, and additions to capital.

The bottom-left panel shows the projection of SOMA net income based on the policy assumptions from the March Tealbook. This projection has the pattern

described at the last FOMC meeting: Income remains very elevated for the next two years, falls to a trough that is roughly in line with historical norms, and then increases once the portfolio begins to expand again. However, the current income projection is slightly below the path from the last FOMC meeting, reflecting the earlier timing assumed for increases in short-term interest rates and for decreases in the size of the balance sheet.

We also thought it would be useful to report on what the SOMA income path would have been under a counterfactual assumption that none of the asset purchase programs ever took place. Just to be clear to President Plosser and others—this is not a possible policy choice at this time. [Laughter] This exercise is, instead, a conceptual one conducted to help us arrive at a measure of the total effect of all of the programs on SOMA income.

Defining an appropriate counterfactual path for this exercise is challenging, and doing so requires a set of assumptions, which we have refined since the last FOMC meeting. Our approach is to assume that the balance sheet grew primarily as a function of the expansion of currency and capital since 2007 and that the procedures for adjusting the balance sheet that were in place before the crisis were maintained. In addition, we assume that interest rates followed the same path as in the baseline projections over this period. This latter assumption is a useful simplification, but it is likely to bias the counterfactual income estimates down slightly, since the purchase programs reduced the yields at which longer-term Treasury securities would have been obtained over time in the counterfactual portfolio.

The counterfactual path of SOMA net income derived under those assumptions is shown by the red dashed line in the bottom-right panel. The effects of the asset purchases on SOMA income can be measured by the difference between that path and the baseline projection (the blue line). As can be seen, the asset purchase programs are projected to boost SOMA net income substantially from 2009 to 2014, reflecting the additional coupon income from the acquired assets. By 2015, the relative income paths cross, as income in the baseline path is weighed down by the higher interest payments on excess reserves and the capital losses on asset sales—factors that are absent in the counterfactual path. Nevertheless, the amount by which the asset purchase programs reduce income in 2015 and beyond is much smaller than the increase in income through 2014, leaving the cumulative difference in the income paths positive and sizable.

Of course, other assumptions for the path of interest rates or the management of the balance sheet could produce substantially different results. The uncertainty surrounding these projections is considerable, as was discussed in the memo for the last FOMC meeting. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Are there questions for Brian? President Kocherlakota.

MR. KOCHERLAKOTA. Thank you, Mr. Chairman. Brian, I had a question about how the equity premium is being calculated—you take a ratio of some kind of earnings divided by the price index and then subtract out some measure of the risk-free rate, is that how it's being calculated?

MR. SACK. Right. It's based on current dividends, a projection of dividend growth that comes from analysts, and market interest rates.

MR. KOCHERLAKOTA. I'm asking because I've seen other forecasts that use different measures of earnings, like a 10-year moving average of earnings. Were you using last year's earnings?

MR. SACK. No. This uses a forward-looking measure of earnings from analysts' expectations. This is the Board staff's measure that appears in the Tealbook and elsewhere.

CHAIRMAN BERNANKE. Vice Chair.

VICE CHAIRMAN DUDLEY. I should point out that there is probably a bit of overoptimism in the analyst estimates. If you look at their earnings forecasts over time, they tend to be optimistic in terms of what earnings actually occur. So that probably causes that equity risk premium measure to be biased upward a bit.

CHAIRMAN BERNANKE. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. Brian, I would guess that the primary dealers canvassed by the Desk reveal the most about likely market reactions to tapering or nontapering. But I have noticed that economists, not traders, seem more evenly split than the primary dealers on whether we are going to taper, so there is at least some difference of view out there in the market. Are there any factors that would militate in favor of tapering, maybe

differences in circumstances between now and last year when we observed the relative dominance of the stock over the flow effect?

MR. SACK. Even in the previous round of asset purchases we weren't convinced that tapering was necessary, but it seemed like a prudent risk-management strategy. To the extent that there are flow effects, this would essentially space them out gradually over a period of time.

As I said, at that time we thought most of the effects came from the stock, and what we've learned looking back on that program gives us even greater confidence in the stock view. We also feel that we are pushing much less dramatically on the Treasury market than we were on the mortgage-backed securities market. At one point we owned something on the order of 80 percent of the total outstanding stock of the current coupon that we were buying in MBS. In Treasuries, looking across all coupons, we own less than 20 percent today. Given our smaller presence relative to the market and the liquidity of the market, we think we can back away without much or any market impact.

Of course, you can make the same argument you made back then. If there were no costs to tapering, then introducing some schedule of tapering could minimize any risks that are left, even if we think they are small. But that would be a decision for the Committee about whether it saw any costs to tapering that would outweigh that. I would argue that there is perhaps a very small benefit to tapering, just for insurance, but it's very marginal in our view.

MR. FISHER. So the answer to Dan's question is that the dealers are better informed about the market dynamic and the stock argument than the economists appear to be.

MR. SACK. It depends on which set of economists you're talking about, because economists are also involved in responding to the dealer survey. So at least this set of economists who are watching these issues carefully took the view that we're not likely to taper.

MR. FISHER. May I ask a question?

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Brian and I have talked about this, but not this bluntly—is there any reason why the dealer survey can't be shared with the FOMC principals as it goes out, so we know what's in the dealer survey? After all, Brian, you are operating on our instruction, and the Desk is responsible for collecting the responses. It would be interesting for us, I think. I had a chance to look at the survey once, but as a matter of course, is there a reason why we don't have a dealer survey circulated amongst the principals of the FOMC? Is there any reason not to? We might learn something from it. Do you feel uncomfortable with doing that?

MR. SACK. We are certainly not against receiving input from the FOMC.

MR. FISHER. No, not receiving our input, just letting us see what is in the dealer survey.

MR. SACK. I see. There may be some consequences about whether it then officially becomes FOMC material; there may be some issues we need to think through.

MR. BULLARD. If it gets reported here, is it not FOMC material?

CHAIRMAN BERNANKE. After the fact.

MR. FISHER. May I just ask that that be considered, Mr. Chairman? I don't think it's a big deal, but I just think it would be helpful for us. Again, it would bring us up to date. All of us are intensely interested in the reports that Brian gives us. It would help us process better the responses, as Brian reports them to the Committee. And, after all, he is conducting this on behalf of the Committee. We are members of the Committee. Unless there is a legal reason not to do it, I'd like it to be considered.

CHAIRMAN BERNANKE. President Fisher, are you talking about getting the questionnaire in advance or the results?

MR. FISHER. I'm talking about the questionnaire. Brian summarizes the results very adequately for meetings.

CHAIRMAN BERNANKE. Oh, getting the questionnaire in advance. Why don't we investigate to see if there are any legal or security issues regarding that possibility? I think, in general, more transparency within the Committee is better, but I can think of one issue, which is that we don't want the dealers inferring too much about policy intentions from the questions on the questionnaire.

MR. FISHER. The Committee is not surveying the dealers. I just want to see what the questions are that are being asked to the dealers. Also, I wouldn't recommend that we do our own analysis of responses. That is the responsibility of the Desk.

CHAIRMAN BERNANKE. We'll look into that.

MR. SACK. In this survey, we were able to make this inference about tapering without adding an additional question because we already had a question about the size and duration of the Treasury program. To preview what could happen for the next meeting, I think we do intend to ask more extensive questions about exit strategy, very similar to what we did in early 2010. At that time, we got a very complete reading of their expectations of exit strategy, and I think we would like to update that for the April meeting.

CHAIRMAN BERNANKE. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. I just want to follow up on the tapering issue. I was a little surprised that it has become the default that we would end abruptly, and I thought that, as you described, the end of the MBS purchase program was successfully tapered. There was a lot of market talk at the time that if the Committee didn't continue MBS purchases, mortgage rates would go up sharply. That was effectively mitigated by our tapering program,

and not too much happened when we pulled out of that market. I thought that the default would be that we would do something similar. I understand the arguments that you just made, but why not do something similar, because otherwise you are exposed to adverse events that would occur in the first two weeks of July, and then would be blamed on the Committee, and then the Committee would be under pressure to reinstitute purchases in order to get those yields to move in the way that markets thought they should move. So I thought that that tapering would be the default, but it seems like it has gone the other way.

MR. SACK. Well, I'll just repeat that I think there is perhaps a marginal benefit to tapering to provide insurance against a market outcome, even if we don't expect it. But our judgment is that it's a fairly marginal benefit at this point.

CHAIRMAN BERNANKE. Other questions for Brian? President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Brian, the markets group did a nice piece on the effect of the increase in the FDIC premium on funding conditions. My understanding is that that's likely to discourage several large institutions in the United States in how they conduct arbitrage of borrowing in the RP market, and that they are planning to reduce their reserve holdings with us. Also, I understand that a large part of the increase in reserve holdings in the past several weeks has been among U.S. affiliates of foreign institutions, and that they seem to be funding that increase with borrowings from their parent. I was wondering if you had any insights into this trend, which seems likely to continue, and whether you think that it is going to have any impact on how the effect of the FDIC premium plays out in U.S. funding markets and, in particular, the shift to funding these reserve holdings of foreign institutions through parents. There's this rabbit hole, and you wonder from where the parents are funding the increased dollar

holdings. And is that affecting the U.S. money market? Does that end up being funded by money market mutual funds that are holding an increasing share of foreign bank paper?

MR. SACK. I don't have a lot of insight into the distribution of reserves between the domestic and the foreign entities. I think that is something we would have to look at. In terms of the FDIC fee, you are correct: the assessment fee will come into place April 1, and it will raise the cost of keeping reserves on the balance sheet and doing the arbitrage that should keep other short-term interest rates relatively close to the interest rate on reserves. We anticipate that this could widen the gap between market interest rates and the interest rate on reserves by a couple of basis points. That is essentially what we see in the markets. If you look out to federal funds futures contracts in the middle of the year, they are trading around 14 basis points. That's a couple of basis points below where the effective federal funds rate is today.

CHAIRMAN BERNANKE. Other questions for Brian? [No response.] Okay. Seeing none, we need to vote to ratify domestic open market operations since January. May I have a motion?

MS. YELLEN. So moved.

CHAIRMAN BERNANKE. Without objection. Thank you. We turn now to item 2, the economic situation, and I will turn to Dave Stockton.

MR. STOCKTON. Thank you, Mr. Chairman. By the admittedly extreme standards of the past few years, this intermeeting period was a relatively quiet one for the staff projection, at least on the domestic front, and, accordingly, we have made only small changes to the forecast. As usual, we've had to grapple with some surprising crosscurrents in the data, but none were so strong as to seriously challenge our view that a moderate recovery is under way and, despite the usual quarter-to-quarter noise, is slowly gaining strength. The major tension that we encountered in assembling this forecast was the contrast between the weaker-than-expected readings we received on spending and the generally stronger-than-expected readings on conditions in labor markets, in the industrial sector, and from surveys of business sentiment. In response to the incoming information, we lowered our GDP growth

estimates for both Q4 and Q1 in the Tealbook by about  $\frac{1}{2}$  percentage point at an annual rate.

This tension was further exacerbated by the data we received after our forecast was completed last Wednesday. Both the merchandise trade data and the retail sales report were softer than we had anticipated and would lead us to mark down further our estimate of the growth of real GDP in the current quarter by another  $\frac{1}{4}$  percentage point to just 3 percent—a cumulative downward revision of  $\frac{3}{4}$  percentage point since January.

Despite having lowered our estimates of growth over the past two quarters, we did very little to our forecast over the remainder of the projection period. In the Tealbook, the forecast was unchanged, on net, for the final seven quarters of the projection period. However, given the additional weakness suggested by last week's readings on trade and retail sales, we would probably take two or three tenths out of projected growth over the next few quarters. You might be concerned that this limited propagation of the slower spending data forward in our forecast may reflect some combination of sloth and stubbornness, but I'll argue that we had some good reasons for discounting that weakness.

For one, some of the downward revision to spending this quarter is attributable to much lower estimates of defense spending. Given current defense appropriations, we feel quite comfortable projecting a bounceback in this spending over the next couple of quarters. Second, the steep decline in nonresidential construction in the current quarter appears to have been exaggerated by the expiration of a federal tax incentive for renewable energy investments. To be sure, the trend in spending in this sector is still downward, but at nowhere near the 10 percent rate we estimate to have occurred in the first quarter. Moreover, the increased drilling activity that is accompanying higher oil prices will provide some buffer to the weaknesses elsewhere in this sector. In the case of net exports, last Thursday's data on merchandise trade point to a smaller current-quarter contribution to real GDP growth than we had penciled into the March Tealbook. But as has been the case in the past couple of months, both exports and imports came in above our expectations—which we broadly read as a signal of more strength in foreign and domestic demand than weakness.

Of course, when I have to spend this much time telling you how all our mistakes over the past seven weeks were, in fact, fully consistent with the views we expressed in January, I will understand if more than a few of you are checking your pockets to see whether your wallet is still there. [Laughter] So, I won't push my luck further and admit that last Friday's retail sales data presented a bit more of a challenge to our forecast. We remain inclined to discount some of the softness in January sales as reflecting that month's severe weather. But with another downward surprise in February that was only partly offset by an upward revision to the January reading, the snowstorm story becomes a bit less persuasive. Moreover, the steep drop in consumer sentiment registered by the Michigan survey in early March, which likely reflected the surge in gasoline prices in recent weeks, points to more subdued growth in spending in the next few months. We have now lowered our forecast of real PCE

growth in the current quarter to 2.4 percent from the 3.1 percent pace that we projected in January. And, if we were redoing the forecast at this point, we would likely knock a few tenths off the growth of real PCE over the next couple of quarters. That said, we are still expecting household spending to pick back up to a pace more in line with the generally favorable fundamentals, including growing disposable incomes, improving household balance sheets, and some anticipation of continued improvement in access to credit.

Of course, the spending data were not the only news in the intermeeting period. Perhaps the chief reason that we have made only minor adjustments to our forecast in 2011 and 2012 in response to the weaker spending data is that the indicators for labor market conditions, industrial production, and business sentiment all exceeded our expectations.

A wide variety of indicators from the labor market point to ongoing, albeit gradual, improvement. In the establishment survey, private payrolls jumped 222,000 in February after an increase of 68,000 in January—leaving the level of payrolls roughly 50,000 above our January forecast. The household survey also suggested improvement, with the unemployment rate now down nearly 1 percentage point from its level last fall. Other measures from the household survey have also brightened somewhat—including a decline in the share of workers employed part time for economic reasons and a drop in recent job losers. Surveys of hiring plans have perked up and help-wanted advertising has improved. And, the choppy decline in initial claims for unemployment insurance has continued, suggesting some further diminution in the pace of layoffs.

Manufacturing activity has also surprised us to the upside. Motor vehicle production was held down by snowstorms and some parts shortages. But outside the motor vehicle sector, growth of factory output has averaged  $5\frac{3}{4}$  percent over the past two quarters, nearly  $\frac{3}{4}$  percentage point faster than we were expecting in January. Moreover, the reports on the manufacturing sector from the national ISM and virtually all of the regional purchasing managers' surveys confirm the strength evident in IP and point to further gains in coming months. And business sentiment appears to be improving outside the factory sector as well, as evidenced by the increases in the nonmanufacturing ISM. Those surveys seem to be consistent with the general tenor of reports that we are getting from our business contacts, which seem more upbeat of late.

Like the incoming data, the key factors conditioning our forecast also presented some crosscurrents, though changes in these factors were mostly small and offsetting. Household net worth came in a bit above our January forecast, and the dollar moved down a bit. Working against these more favorable developments were the higher path for oil prices and the somewhat greater fiscal restraint that we have assumed over the next two years relative to our January forecast.

Putting all of the incoming information together, we felt, and still feel, comfortable reading the incoming economic and financial data as suggesting that a

moderate expansion is under way and is likely to slowly pick up some steam. Accommodative monetary policy, waning negative wealth effects, and a gradual further easing in lending standards are expected to be reinforced by gains in income and employment and an accompanying improvement in business and household confidence. We anticipate that those powerful forces of recovery will be moderated, but not derailed, by a swing toward federal fiscal restraint, the ongoing budgetary problems of state and local governments, and the still-sizable overhang of residential and commercial properties.

The continued upward movement in oil prices presents some risks to our generally benign forecast of real activity. Our models suggest that the increase to date is likely to be only a small drag on output growth over the next year or so. And if oil prices level out, as is embedded in our forecast, that seems about right to me. But as these prices have ratcheted higher in recent months, I've had the queasy feeling that the models, just as they did when house prices moved out of historical ranges, might fail to capture the types of nonlinearities that have at times been the downfall of our forecast. That concern would be especially acute if prices continued their upward trend. The steep drop in consumer sentiment over the early part of March certainly brings that risk into sharper focus. While I could easily see coming to regret this statement, I'll say that we don't think the increases in oil prices, to date, have placed the expansion at serious risk. But we will be watching these developments and their economic consequences for signs that the recovery is becoming more vulnerable to rising oil prices.

Of course, our inflation outlook has also been shaped by developments in the markets for oil and other commodities, which Nathan will discuss in greater detail momentarily. As you know, we boosted our forecast for total PCE inflation this year to nearly 2 percent from the 1¼ percent pace we had previously projected. Oil prices are expected to average roughly \$10 per barrel higher this year than in our January forecast—leading to a more rapid rise in consumer energy prices. Moreover, the steep increases in the prices of agricultural commodities are likely to place further upward pressure on retail food prices in coming months. And increases in the prices of other commodities are showing through to higher import prices, which are likely to be reflected in somewhat higher core consumer prices in the next few quarters.

Those pressures, along with a greater projected tightness in labor and product markets in this forecast, led us to mark up core PCE price inflation as well—by ¼ percentage point in both 2011 and 2012—to 1¼ percent in both years.

We continue to take our cues on the outlook for commodity prices from the futures markets. Although we don't see an obviously superior approach, we certainly acknowledge that participants in those markets do not have a distinguished track record anticipating broad trends in these prices. For that reason, we explored two alternatives in the Tealbook that involve longer and larger upward movements in oil and other commodity prices. As we demonstrated in the scenario that incorporates only a larger upward movement in commodity prices, headline inflation would move above our baseline forecast for a noticeable period of time. But with inflation

expectations anchored in this scenario, total price inflation falls back quickly toward baseline after commodity prices plateau at their higher level.

The second scenario couples the rise in commodity prices with a variety of other elements contributing to a less favorable inflation environment. Specifically, we assume a lower level of potential output, the emergence of greater production bottlenecks, and an unmooring of inflation expectations. The first two factors add to the inflationary impulse generated by rising commodity prices. But, not surprisingly, it is the third factor, the unmooring of inflation expectations, that presents the greatest challenge to achieving stable inflation over the intermediate period.

Of course, in real time, it will be difficult to confidently distinguish between these scenarios if they were to materialize. The magnitude and persistence of any rise in commodity prices would be hard to judge in advance. Moreover, the size of the pass-through of any given increase in commodity prices into core prices can only be estimated with considerable imprecision. And, finally, the readings on expected inflation will be noisy and, at times, contradictory, and their consequences for broader price setting and wage determination will be uncertain. The recent information on inflation expectations may be a case in point. As Brian has already noted, TIPS-based measures of longer-term expectations have only edged up, while last week's increase of 0.3 percentage point in the Michigan survey's measure of 5-to-10-year-ahead inflation expectations was larger. Some, but not all, of that increase reflects the fact that the Michigan survey measures average expectations over the next 5 to 10 years, so that a portion of the rise in the longer-term reading is likely attributable to the 1¼ percentage point jump in one-year-ahead expectations. Still, these developments will bear close scrutiny in the period ahead, and the signal-extraction problems with these noisy readings will remain challenging. Nathan will continue our presentation.

MR. SHEETS. The factors shaping our international forecast are of nearly biblical proportions: We are grappling with the effects of droughts, floods, wars, and earthquakes. As such, it is safe to say that the confidence bands around our projections are even wider than usual.

As you know only too well, oil prices have risen sharply since the last FOMC. Early in the intermeeting period, concerns in oil markets mounted as unrest in Egypt intensified, eventually toppling the country's long-standing regime, and as the unrest spread to other countries in the region. World oil prices then spiked more than \$10 per barrel in mid-February, as violent civil conflict in Libya disrupted an estimated 1.2 million barrels per day of oil production (about 1½ percent of global output). Although Saudi Arabia has reportedly increased its supply to make up some of this shortfall—and oil prices have retreated some over the past couple of days in response to the uncertain situation in Japan—WTI is still trading this morning only a bit below \$100 per barrel.

By our reckoning, the increase in oil prices not only reflects the disruption in Libyan production but also the possibility that civil strife in other countries, such as

Algeria, Yemen, and Oman, might reduce global oil supplies further, although OPEC's remaining spare capacity of roughly 4 million barrels per day could temper the blow from such disruptions. In the unlikely event that unrest spreads to Saudi Arabia itself, threatening its 10 percent share of global production, the rise in oil prices would be almost unthinkable.

Although soaring oil prices grabbed prominent headlines, many other commodity prices continued to rise sharply in the weeks immediately following the January FOMC meeting. These prices were pushed upward by the same combination of rebounding global demand and commodity-specific supply constraints that had been at work through the previous six months. However, since the mid-February spike in oil prices, which poses a notable headwind for global economic growth, our index of nonfuel commodity prices has stopped rising, with a number of key commodities—including copper, nickel, soybeans, and wheat—posting declines.

Of course, the key question is where do commodity prices go from here? According to the futures markets, which shape our forecast, commodity prices are likely to flatten out over the next couple of years. But in the spirit of full candor, that's what we said at your January meeting and, admittedly, at many meetings before that. While we no doubt will be wrong again, let me suggest that the flat futures path, in this instance at least, provides a useful benchmark. Food prices have been driven upward by various droughts, floods, and other weather anomalies over the past year. These effects were exacerbated by the decision of several countries to build precautionary food reserves or restrain exports. Assuming weather patterns normalize, supply conditions should improve over time. Indeed, some food commodities now have downward-sloping futures curves. Metals prices have been driven upward by relentless growth in Chinese consumption, which now accounts for over 40 percent of global metals use, up from about 15 percent a decade ago. Given recent evidence that Chinese growth is coming off the boil, and with global investment in the mining sector now on the rise, there is good reason to expect a moderation in metals prices over the medium term. As for the oil markets, geopolitical uncertainties are casting a long shadow, but we see plausible scenarios in which these tensions abate without further disruptions to global oil production. In addition, OPEC's sizable excess capacity should continue to provide some near-term buffer against sustained price spikes. Over the longer term, the high level of oil prices should eventually elicit new supply, reduce industrial and household demand, and lead to changes in technology that facilitate further economizing.

Stoked by the rise in commodity prices, headline consumer price inflation abroad has surged to nearly a 5 percent pace, with the advanced economies and the EMEs both posting sizable increases. Here at home, the increases in foreign inflation, coupled with higher commodity prices and the recent depreciation of the dollar, have worked together to drive up U.S. core import price inflation to an estimated 7½ percent rate in the current quarter. Going forward, we see both foreign inflation and increases in U.S. core import prices slowing later this year, in line with the projected flattening of commodity prices.

Even so, several foreign central banks have recently expressed heightened concerns about inflation risks. For example, President Trichet, at his latest press conference, surprised us by signaling that the ECB is likely to hike rates soon. And recent vote tallies from the Bank of England's Monetary Policy Committee suggest that a hike may be imminent there as well. In addition, a number of emerging market economies, including China and Brazil, tightened monetary policy over the intermeeting period. We anticipate that many EMEs will remain on a tightening trajectory, as they seek to tame the risk of overheating. All told, we now see foreign central banks removing monetary accommodation at a somewhat faster clip than we had expected in January.

Recent readings on foreign economic activity have come in above our expectations. Industrial production and PMIs in the advanced economies have been upbeat. Monthly indicators for the EMEs have generally also surprised on the upside. Friday's earthquake and tsunami in Japan represent a devastating human tragedy, which could get significantly worse if the affected nuclear facilities are not stabilized. In response, the Bank of Japan has moved to reassure markets by providing substantial liquidity and doubling the size of its asset purchase program, but the Nikkei has nevertheless plunged more than 15 percent over the past two days. The overall effects of the 1995 Kobe quake on output were limited, but the eventual scale of this episode is impossible to judge and its ultimate impact on the overall trajectory of Japanese economic activity—and global activity—remains highly uncertain.

Our Tealbook forecast saw foreign GDP growth of roughly 3½ percent in the current quarter, a little stronger than in our last forecast. Going forward (and assuming that disruptions to Japan's economy are not long-lived), we see foreign activity continuing to expand at about a 3½ percent pace, with growth in the EMEs hovering around 5 percent and the advanced economies expanding at about a 2¼ percent pace. These projections have been marked down a bit from January, reflecting our judgment that higher oil prices and tighter monetary policies abroad will create some modest additional headwinds for the global recovery.

Over the weekend, European leaders surprised the markets by announcing reforms to the European Financial Stability Facility (EFSF), including increasing its effective lending capacity to a full €440 billion, allowing the EFSF to purchase bonds in the primary market (in the context of an adjustment program), and lowering the charges on borrowers. The leaders also announced a framework to tighten surveillance of fiscal performance, competitiveness, and labor market conditions in member countries. In response to the announcement, debt spreads for European peripheral countries fell roughly 20 basis points.

While falling short of a "Grand Bargain," these announcements strike us as a meaningful step forward. In particular, the expansion of the EFSF's lending capacity goes a good way toward putting a credible backstop behind Spain and Portugal, which we see as a critical requirement for stability in the region. The next key milestone in the process of rebuilding market confidence will come with the release

of bank stress test results in June. Suffice it to say that we will continue to monitor these developments closely.

Our outlook for the foreign economies, along with our projection of a moderately depreciating dollar, should fuel real export growth of more than 9 percent in 2011 and 2012. Folding in the January trade data that we received after the Tealbook closed, we expect real imports to bounce back this quarter, expanding more than 11 percent, but then to move down to a pace of around 5 percent through the forecast period. Net exports, after subtracting  $\frac{1}{2}$  percentage point from U.S. GDP growth last year on average, are expected to make a small positive contribution of about  $\frac{1}{4}$  percentage point this year and next. Notably, we see the current account deficit narrowing to  $2\frac{3}{4}$  percent of GDP by the end of 2012. With the higher path of oil prices, the oil import bill will widen some, but the solid pace of export growth should push the non-oil trade balance to essentially zero by the end of next year. Thank you, and we're happy to take your questions.

CHAIRMAN BERNANKE. Thank you very much. Are there questions for our colleagues? President Fisher.

MR. FISHER. Mr. Chairman, I'd like to ask a question both of Dave and of Nathan. Dave, you gave a rather extended monologue on inflationary pressures, and you concluded by referring to the TIPS-based measures that Brian talked about, and added a comment about the Michigan survey. Would you say that long-term inflationary expectations remain stable?

MR. STOCKTON. I think I would at this point.

MR. FISHER. Based on those new data points, you still feel that way?

MR. STOCKTON. Yes. I mean, reasonably stable. As Brian noted, we don't really see much evidence yet in the TIPS markets that there's been a significant shift in inflation expectations. What we have on the upside on inflation expectations comes from the first half of March in the Michigan survey. Even those longer-term expectations tend to be sensitive to gasoline prices. As I indicated, even if you look at the increase in the 5- to-10-year ahead, and make some reasonable adjustment for the fact that near-term expectations have increased significantly, that upward movement, even if you abstract from that, might be one tenth or two,

which is within the range in which things have been moving. But I think that certainly is going to bear watching going forward.

MR. FISHER. Nathan, you talked about Japan in terms of the impact of the devastation particularly on the Japanese equity markets. Could you give us just a first glance—and I realize this needs to be studied—as to what kind of impact it might have on the price of key commodities, such as lumber, iron ore, and steel, that will likely be imported to rebuild Japan? And then the supply constrictions on autos and other products that they do export, or the price effect, say, on semiconductors. Have you had a chance to at least initially think that through?

MR. SHEETS. Given the rapidly moving events, any answers to those questions are still highly speculative. If they're able to quickly get a handle on this situation, and it is similar to what we saw with Kobe, then I would say those kinds of effects would be minimal. But if the situation continues to escalate—for what it's worth, that seems to be the message we are getting from the Nikkei. Following the Kobe quake, the response was very similar to what we saw yesterday in equity markets. But then there was a modest bounceback, rather than the 10 percent plunge. So it seems to me that there is a lot of concern. If anything now, the risks are tilted to the downside. Substantial disruptions there would require substantial rebuilding, and as you suggest, would probably put some downward pressure on commodity prices in the very near term when they weren't being imported there. But over the medium to long run, as they were rebuilding, it could be a substantial upward impetus.

MR. STOCKTON. We would probably expect to see some upward pressure in the tech sector from the supply chain disruptions that occurred. I think Japan provides a significant fraction of the wafers that are used by Taiwan to actually punch out the semiconductor chips. Almost certainly, there will be some upward pressure in that area.

CHAIRMAN BERNANKE. President Evans.

MR. EVANS. Thank you, Mr. Chairman. In reading the Tealbook discussion of the inflation projection, I wasn't surprised, but it does rely heavily on resource slack. Maybe it's the fact that the section on resource utilization immediately precedes the inflation discussion that reminds us of that. I know that many around the table are uncomfortable with this type of inflation forecasting, and I know that some have suggested that we focus a little more attention on growth rates. You don't emphasize growth rates so much for inflation determination. Would you care to discuss the evidence and provide a little bit of a guide as to how we might think about that?

MR. STOCKTON. I wouldn't want to overstate the importance of slack. In the models that we use, in terms of year-to-year variation in core inflation rates, slack still only accounts for a small fraction of those year-to-year variations. But we do think there is evidence to support the view that levels of slack, especially when they are as large as they currently are, place downward pressure on inflation. In the context of stable inflation expectations, however, as that slack is taken up, there will be some upward pressure on inflation. This is not an accelerationist view of price determination that underlies the basic forecast.

In at least some of the models, there has been evidence that there are some speed effects. They tend to be small, and they're not the dominant factors. You can see speed effects most importantly operating through things like intermediate materials prices, which are set in more auction-type markets, and as demand improves, it isn't the level of slack that matters, it's the actual change in supply and demand that matters. That shows through in the initial phases of recovery when you are getting a significant pickup in the industrial sector—there are more-rapid gains in intermediate materials prices, at least for a time. Then, of course, when that initial phase

is over, those price increases generally tend to slow down. That is what we call the chief speed-type effect, and that effect is built into our basic forecast here. I think we'd look at both of those things, but clearly we do believe that the evidence in both wage and price determination is that the level of slack is an important determinant of prices.

CHAIRMAN BERNANKE. President Bullard.

MR. BULLARD. I just have a couple of questions, Mr. Chairman. We often say with the Michigan survey that it is very sensitive to gas prices. So what is the correlation between gasoline prices and the movements in those expectations? Do we know?

MR. STOCKTON. If you run regressions to take a look at the importance of food and energy prices, there is a little bit of excess sensitivity, but mostly the coefficients on those regressions suggest that gasoline prices affect price expectations in the same way that gasoline prices affect overall inflation. So there tends to be in the short run some excess sensitivity, but over the longer term, not so much. We had a picture in yesterday's pre-FOMC briefing of both the short-run and longer-term responses to the Michigan survey, and you can clearly see short-run inflation expectations responding quite significantly to gasoline price spikes.

MR. BULLARD. Yes. I've said this myself many times, so I'm very familiar with it. But does it matter? One of the things that we often say about movements in key prices is that it might feed through to expectations and more general price increases, and this is the danger, and this is what we're worried about. Should we be dismissing that, or should we be taking that on board as an important indicator?

MR. STOCKTON. I think to the extent that you think the rise in oil prices or gasoline prices will be temporary, that would be an important piece of your forecast of how those expectations will evolve. If you think that's not going to be temporary, then you might think

you'd get a more persistent rise in inflation expectations, if those prices continue to rise at the rapid pace they have of late. You're right, it's the level of inflation expectations that matters. It's not the source.

MR. BULLARD. Okay. My other question is: Is slack large in Europe, and is that going to temper inflation developments in Europe?

MR. SHEETS. Our reading of the output gap in the euro area is somewhere between 3 and 3½ percent of GDP. Certainly, our feeling is that that would be a factor weighing on underlying inflation in Europe. The spike that they are seeing is very much driven by various kinds of energy prices. Underlying inflation, core inflation there, is running about 1¼ percent.

CHAIRMAN BERNANKE. Governor Tarullo.

MR. TARULLO. Nathan, doesn't that vary a good bit, though, by country? That is, the amount of slack.

MR. SHEETS. Absolutely. That figure that I cited was for our estimate of the euro area as a whole. Now, the ECB may have a more narrow assessment of how much slack there is, but German unemployment is down relative to before the crisis by 2½ percentage points, while Spanish unemployment is up 10 or 12 percentage points. So there is a dramatic difference between the peripherals and particularly Germany.

MR. PLOSSER. So what would you say about the United Kingdom, then?

MR. SHEETS. Which bit?

MR. PLOSSER. The amount of slack versus the inflation rates in what you'd call underlying core there.

MR. SHEETS. We also see a fair amount of slack in the United Kingdom. Our view is that it's been special factors that have driven up U.K. inflation—depreciation of the pound, taxes,

energy price increases, and so forth—but we have been telling that story now for quite some time, and the Monetary Policy Committee of the Bank of England has been telling that story for quite some time. I think all of us are getting a little bit uncomfortable as to whether there may not be something more there with the inflation story as headline inflation reaches the 4 percent range. My reading of the breakevens for the United Kingdom is that I do see a gentle upward climb in those breakevens, and I think there maybe has been a little bit of increase in inflation expectations. They have a very complicated monetary policy conundrum there. I think it's striking that at their last meeting they got dissents on both sides: They had two folks who were dissenting for tighter policy, and one who was dissenting for easier policy. They are in a very difficult situation.

CHAIRMAN BERNANKE. President Bullard, were you done?

MR. BULLARD. I just wanted to ask a follow-up question. Is regional variability in unemployment in Europe different than it is in the United States? There is regional variability in the United States, with significant differences.

MR. SHEETS. I'm not sure we have a state counterpart to Spain, for instance, but there is a fair amount of variability in Europe, and there is a fair amount of variability across the U.S. states.

MR. BULLARD. Maybe not at the state level, but probably at the county level—very high unemployment.

MR. SHEETS. Yes, sure, if you go down there, but then the counties would be a smaller, more concentrated geographical area than one of these countries, with the possible exception of Luxembourg.

MR. BULLARD. And Liechtenstein.

MR. FISHER. San Marino.

CHAIRMAN BERNANKE. President Trichet has been making this argument—and I would just inject that I don't find it completely plausible—Germany is 2½ percentage points below the pre-crisis level in terms of unemployment. Spain is 12 percentage points above the pre-crisis level. They don't have a common fiscal authority. They don't have common unemployment or retirement funds. I think the problems that they face in terms of heterogeneity seem to me to be much deeper than ours, although we certainly do have some.

MR. BULLARD. I'm not sure what the numbers are.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. I would like to ask more on the staff's thoughts on this dilemma about oil price futures projecting a return to low rates of change, and yet they keep getting it wrong. Just as a context for this, a stylized characterization of the four years from the end of 2003 to the end of 2007 is that core ran 2¼. We kept seeing energy price increases. We kept thinking they were about to flatten out, but they didn't, and we ended up with overall inflation of 3 percent averaged over four years. You might judge that something of a failure, at least a disappointment. So what kind of scope do you see for the line of reasoning that would say, "The futures markets may say this, but let's act as if they are going to get it wrong and reduce the target core we want to try and run on a sustained basis, just to leave room for an upward trend in the relative price of energy." We get these financial stability reports, by the way, that routinely question the market's assessment of a whole range of asset classes. Why don't we do that with the oil futures prices as well?

MR. SHEETS. That's a broad question. Obviously it's one that we're struggling mightily with. Looking at the path of oil prices and other commodity prices over the past

decade, it does seem like there's a trend there, and I think we could go back over the various Greenbooks and Tealbooks over the last 10 years, and essentially each time the staff has said, "It's going to flatten out." One point here is that we have looked far and wide for other frameworks that would dominate the futures markets, and we haven't found anything better. We present the futures markets in our forecast as a useful intellectual benchmark. I would say that if the Committee's view is that prices and the risk to oil are skewed upward relative to what we're writing down, the Committee is free to incorporate that into its deliberations, but we are just trying to provide an intellectual benchmark that's defensible and coherent for oil prices. That said, we're continuing to look, and over the next six or eight weeks we are going to look even harder than we ever have before, into other ways and other approaches that we might use to forecast oil prices and other commodity prices. In particular, it strikes me as if there might be something about China's share in the global economy that might be useful to us in doing these forecasts. As you say, it's a dilemma; it's a challenge. Obviously, as asset-like entities, commodity prices are very, very hard to forecast, and consistent with that, the essential random-walk nature of the futures forecast is more or less what you would expect for that kind of a thing.

CHAIRMAN BERNANKE. President Lockhart had a two-hander.

MR. LOCKHART. Nathan, regarding the predictive power of futures markets, I had the impression that they had individual idiosyncrasies. In the case of short-term oil futures, my sense was that the spot price and the storage cost create the curve. The futures price is obviously different than the spot because of the addition of the storage cost. Whereas for a food commodity, it would be more a question of predicting supply and demand, with maybe something else factored in. In foreign exchange, we know that futures prices are no prediction of the future spot rate; they're just interest rate differentials.

MR. SHEETS. Right.

MR. LOCKHART. To what extent is using just commodity futures as a benchmark a valid approach?

MR. SHEETS. As I noted, we have looked at a variety of other approaches and assessed their forecasting power and also their biasness or lack of biasness in forecasts, and we have not found anything that dominates the futures curves. The way we've characterized the futures curves, and I think it's the correct characterization, is that they are not very good, but they're at least as good as everything else that we've looked at so far, but we're going to continue to look. It's also true that if you look at the disaggregated futures curves, as you've indicated, you get heterogeneous stories for heterogeneous commodities. For instance, as I mentioned, right now many of the food commodities, given these weather shocks, are expecting declines going forward, and that seems to be a perfectly plausible, perfectly reasonable expectation. It's the best we've got. There are underlying stories that are useful in helping us think through what is going on in these markets. We'll keep looking.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Just to follow up, Dennis's points about both costs of carry and storage have become important elements in how you think about the actual path of the futures curve. Have you looked at predictive content of the overall shift in the curve as opposed to the level? Because I thought there was evidence that when the whole curve moves, it tells you something more than the path, and I think that is what Dennis was getting at. I wonder if you had any thoughts about that.

MR. SHEETS. In some sense, that is the random-walk nature, that these whole paths are typically moving around just for the spot price. The question is how much in addition to a random walk we are getting from the futures curve. It is just a little bit.

MR. PLOSSER. I don't know whether it's a random walk or not. We're talking about predictability here.

MR. SHEETS. Yes, that's right, how much additional predictive power do we get in the futures curve relative to the random walk. And the answer is, it's a pretty darn close call. I think that is consistent with your point that it is the movement of the up and down of these curves, but that that movement is generally being determined by what's going on in the spot market.

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN DUDLEY. Nathan, I wish you the best of luck in your search.

[Laughter]

MR. STOCKTON. If he's successful, he won't be sitting here anymore either.

[Laughter]

VICE CHAIRMAN DUDLEY. Let me put it this way. If there was an easy solution to be found—the private sector has hundreds of people that have searched everything to find it. So you have to be skeptical that there's a better way.

MR. SHEETS. Right. The question is, can we find a better benchmark to condition the forecast on. I think that's the question, which may or may not have better RSME kinds of properties or better biasness or unbiasedness properties. But are we conditioning the forecast on the right set of assumptions? My guess is that I'm going to come back at the next meeting and say, "Look. Here's the futures curve. This is what we're conditioning on." We want to keep looking, but I'm not naïve about it either. I agree with what you're saying.

CHAIRMAN BERNANKE. Other questions? President Bullard.

MR. BULLARD. I just have one more question, Mr. Chairman. In your discussion, Nathan, you talked about weather disturbances and food prices. Do we have independent evidence that global weather patterns have been particularly different from other years, other than looking at just prices of food products and so on?

MR. SHEETS. You're pressing me here. My expertise in meteorology is limited.

MR. BULLARD. I thought that there are a lot of data on this, and we could actually check that independently instead of just relying on the stories that are told in financial markets.

MR. SHEETS. Right. There are numerous anecdotes. In addition, we are being affected by "La Nina" kinds of developments, which have been extraordinary and unusual, and it is reasonable to expect that they are going to normalize in coming years. We have been in touch with the USDA and others so that what we're saying is consistent with what other agencies are saying, what other analysts are saying, and the broad view of the markets.

CHAIRMAN BERNANKE. Anyone else? [No response.] All right, thank you very much. We're ready now for the economic go-round, and we'll start with President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. As we collected inputs from our business contacts and directors over the last two weeks in the Sixth District, we probed especially on economic growth assumptions, including changes in outlooks as a result of oil prices, business cost pressures and pass-through intentions, and on planned investment, including motivations for expenditures. Most sources described the economy as stronger and increasingly self-sustaining but voiced concern about the potential adverse effects of continued upward pressure on oil prices. Contacts representing industries with little connection—namely, the auto industry, food retailing, and tourism—point to \$4 per gallon gasoline as a tipping point for consumer budgets.

According to these sources, at \$4, significant changes in consumer spending behavior should be anticipated. Some contacts expressed concern particularly about the region's economy continuing to be weighed down by excess residential real estate and the potential for resumption of falling home prices. Our questioning on actual business cost pass-through from rising commodity prices was mixed and inconclusive. However, a number of contacts across a wide spectrum of businesses are at least entertaining the idea of trying to push higher costs along. A few are confident they will be successful, but most are taking a wait-and-see approach. We heard little from our contacts about continuing disinflation, and it's clear to us the tone of the conversation around inflation has shifted to upside inflation risk and, in their view, reality.

There are a few upside developments to report. Industrial activity is strong in the Sixth District. Air travel nationally, both business and pleasure, is much improved from this time last year, and wage pressures remain light, particularly for lower-skilled and less-educated workers. While conditions across business and industrial sectors differ, most have evidenced improvement in the last few months, and business executives are cautiously positioning their companies for higher business activity. The exceptions are largely associated with homebuilding, commercial real estate construction, and building materials.

Turning to my outlook, my baseline outlook looks essentially the same today as it did the last time we met. I continue to expect the economy to gradually gain strength over the course of this year and next. My growth path for the economy is more modest than the Tealbook's. The difference owes largely to my assumption that businesses will continue to be cautious regarding capital spending for business expansion as well as new net hiring. This results in a more modest rise in private spending over the forecast horizon.

I have not revised my inflation outlook and still see the underlying price trend on a path consistent with our price stability mandate. That said, I think the price conditions, as opposed to inflation conditions, are creating quite tricky circumstances that present communications challenges. Nonmonetary pressures on prices—that is, commodities’ supply and demand, for example, affected by weather—combined with rising global demand from strong economic growth in emerging markets and accelerating recovery in advanced economies, combined with rising risk premiums in petroleum markets reflecting unrest in the MENA region are fueling increasingly vocal inflation anxiety. My conclusion is, all indications of expectations bear very close watching.

Anticipating the policy round discussion of statement language, let me add that my reading of the core inflation data since November leads me to the view that the word “subdued” may not aptly characterize what has occurred. As I see it, there has been an upward firming of the inflation trend as was intended.

My sense of the balance of risks associated with my economic growth projection is reasonably balanced. It is worth mentioning, however, that prior to the emergence of the Middle East–North Africa unrest and the resulting rise of oil prices, I was moving toward an outlook that acknowledged more upside than downside risk to growth. Two downside considerations are in my mind returning the scales to balance. As I said, oil prices and, second, a resumed decline in home prices could damp household confidence and sap some of the strength coming from consumer spending.

I think the risks around the inflation projection are also balanced, but here I make that judgment with more apprehension. While longer-term inflation expectations measured by TIPS or household survey data are still inside their range of the past five or six years, they are at the

upper ends of those ranges. It seems to me, therefore, a lot depends on those expectations remaining steady. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. Since our last meeting, we have received data which, after taking into account the noise created by inclement weather, seems largely in line with what we had been expecting. What had not been anticipated at the last meeting were the changes sweeping the Middle East that have contributed to higher oil prices or the horrible tragedy unfolding in Japan. It's probably too soon to know whether developments in the Middle East will cause a temporary spike, which would have very little effect on the outlook, or a more permanent change in the price of oil. However, assuming that oil prices remain elevated and adding to that the greater degree of near-term fiscal restraint under discussion in recent weeks, the net effect of these changes from the past meeting is to leave my inflation forecast little changed, but to reduce somewhat my outlook for the future growth in the economy.

Like the work presented in President Evans's analysis, work done by Boston staff suggests that the impact of the oil supply shocks will have minimal impact on the underlying inflation rate in the medium term. This econometric result likely derives from a number of factors. First, commodities account for a relatively small share of our economy, as a labor-intensive service sector has become more important. Second, with longer-term inflation expectations well anchored, perhaps due to the greater confidence in the Federal Reserve's commitment to controlling inflation, a change in the relative price of commodities is unlikely to pass through into final goods prices. Finally, with significant slack in labor markets likely to remain in the economy for some time, it is unlikely that rising commodity prices will have much impact on wages and salaries.

Together, these factors likely account for why over the past two decades even large food and energy price movements have had minimal impact on underlying rates of inflation. Thus, while recent food and energy shocks will cause total measures of inflation to diverge temporarily from core, we expect total inflation to return to the core inflation rate over time, leaving little or no imprint on the core inflation rate. Given that core measures remain well below 2 percent and that there remains significant slack in the economy, I expect it to take some time before the inflation rate settles at 2 percent.

While the effects of oil price shocks on inflation are likely to be quite modest, they are likely to have a contractionary effect on economic growth. Boston modeling implies that recent increases in oil prices will shave roughly 0.4 percentage point off GDP growth and cause the unemployment rate to be roughly 0.2 higher than it would be absent the oil shock. In addition, if the Congress were to implement additional spending cuts this year of \$50 billion, that would also reduce GDP by roughly the same magnitude as the oil shock. While I'm pleased that the incoming data have been broadly consistent with a mild recovery, the contractionary effects of the oil shock and fiscal austerity, coupled with continued risks from housing, state and local spending, and international events, have persuaded me that continued accommodative monetary policy is necessary to support this modest recovery and to provide some insurance should any of these risks materialize. Thank you.

CHAIRMAN BERNANKE. Thank you very much. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. To Nathan, I want to just suggest that when I became a member of the FOMC, I had a friend give me a crystal ball to use, and over the years it has done just about as well as our models. [Laughter] So feel free, if it would be any help to you.

I'm going to focus on my District because the District is moving pretty much in parallel with the nation, with a couple of exceptions, which I'll mention. The District is continuing to expand. It has since the last FOMC meeting in several areas. Our labor market is improving. In fact, in some of the high-skilled areas, we're seeing some indications of shortages. But other than that, of course, we have a lot of slack there as well. District manufacturing activity continues to strengthen, thanks to export activity. Our input costs have risen further, and a few contacts are indicating that they are purchasing additional raw materials way in advance, as they try to anticipate higher future costs. More District contacts also reported higher prices for finished goods, and expectations for higher finished goods prices increased sharply in our last survey.

One exception, of course, is energy, which in our region is picking up a lot of momentum as they shift from gas to oil, and we're seeing a lot of investment activities in those areas, and some increase in employment in those areas as well. In addition, strong global demand and tight inventories continue to push our agricultural commodity prices up, and we are seeing increasing amounts of interest from money managers and others in not only our commodity side, but in the land side as well. As I have been pounding away at the fact that our land speculation is getting more out of hand, my most recent example is a pretty strong signal that we're heading in the wrong direction: In a conference we had on lending in Omaha a few weeks ago, one of our staff was talking with one of the possible lenders that was looking at activities; the individual was in lending from Los Angeles and felt that lending in movies was too risky and was turning to land. They were actually looking for land deals in the region, so it's in trouble. Other than that, the inflation outlook continues to be modest but building, and we will continue to watch that in our region as well; I think it is very similar to what we're seeing at the national level. Thank you.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. By most accounts, the economy has improved over the intermeeting period. The commentary I received from my business contacts this round was quite good. I can't even recall anyone bringing up concerns over regulatory uncertainties or other such annoyances.

Most sectors reported increasing momentum in line with or even a bit better than their earlier business plans. Overall, my reports from business contacts seem consistent with my January forecast, which had GDP growing at about a 4 percent rate over 2011 to 2012. However, I continue to hear plenty of caveats around these good reports. For example, although no one has seen it yet, many contacts were concerned that higher energy prices might become a drag on demand, as President Rosengren mentioned. Nevertheless, the good news outweighed the bad, and I now feel more confident about my earlier strong outlook.

My manufacturing contacts were particularly upbeat. Automakers are increasing output, and home appliance production is still doing surprisingly well. Heavy equipment manufacturers are benefiting from robust replacement demand, even for construction equipment. Here, though, is one of those caveats that temper my enthusiasm. One story I heard was that in order to raise cash during the downturn, many construction and equipment leasing companies sold their equipment to firms operating overseas. Think of this as eating your seed corn. Now they are buying new equipment to restore their capacity. This is a good development, but it is most likely a short-run rebound effect rather than a signal of a more fundamental strengthening in the domestic construction industry.

Clearly, the strength in manufacturing is generating strong demand for steel. ArcelorMittal is running its current U.S. capacity just about flat out, and they are in the process

of bringing one of their three remaining idle blast furnaces back into production. Steel producers complain that iron ore prices are outrageous. At the same time they're pretty satisfied with their ability to raise prices to their customers. Of course, this means steel users are all complaining about costs. It's often hard to get these manufacturers to say how much of the cost they are able to pass on to their customers, but I got the impression that many are taking some hits to their margins. Ford was explicit about this, noting both that they were facing higher commodity prices and that the competition was driving the vehicle transactions prices lower. Also, other than the obvious direct effects on gasoline and the like, I heard few reports of downstream price pressures emanating from the pass-through of higher energy costs.

I also am not hearing of any cost pressures from wages. Indeed, most current indicators suggest substantial restraint. Because you've all seen the reports, I'll simply say, "Madison, Wisconsin." Another example is the recent Caterpillar labor negotiations. Caterpillar signed a contract with the UAW that gives them negligible labor cost increases for the next six years. I'm pretty sure that if we go back to the previous episodes like the 1970s when inflation rose well above our goals, price increases were strongly reinforced by sizable wage pressures. Those channels are absent today.

Of course, even though current wage growth is weak, the labor market clearly has improved over the past few months. This is an important piece of good news that we had been waiting for, but the extent of improvement is still difficult to read. Larger payroll employment gains are welcome, but they are still modest relative to the declines during the recession. On the other hand, the dramatic and continued reductions in the unemployment rate have clearly been greater than we expected. It would be especially encouraging if these improvements in the household data reflected a step-up in hiring. However, most of the drop in the unemployment

rate over the past few months was due to a decline in transitions of workers from employment to unemployment. In other words, the flow into unemployment dropped because of fewer job separations, and Dave Stockton mentioned that job losers are down. But the flow out of unemployment and into employment has not improved significantly—not yet. This is consistent with the story from JOLTS, so the two surveys, payroll and household, are consistent. Layoffs are down, but hiring has yet to pick up in a meaningful way. It is also in line with conversations from my business contacts who still don't report robust hiring plans. While there has been an improvement, I don't think we're looking yet at a vibrant labor market with robust hiring.

More generally, I continue to believe that there still is substantial slack in labor and most product markets, in addition to the factors I just talked about. I would also note that the Tealbook's revised assumptions on labor input only subtracted a few tenths off of the GDP gap, and with unemployment and vacancies both falling, the Beveridge curve is clearly looping back, as you suggested it would at earlier meetings, Mr. Chairman. This reinforces my take-away from our discussion last meeting: I don't think we saw any evidence then that the bulk of the increase in unemployment was structural. Various estimates all suggested that monetary policy could reduce slack.

This assessment of resource slack also continues to be an important downward influence on our inflation outlook. As an offsetting factor, the downside tail risks on inflation expectations appear to have fallen substantially. So inflation expectations may have a firmer upside anchor, and while I don't think cost pass-through will be large, we do expect some effects similar to those built into the Tealbook for many of the reasons that I mentioned in the memo that I circulated to the Committee.

For a variety of reasons we have moved our inflation forecast up a couple of tenths. We now see core PCE reaching the 1½ percent range in 2013; that would still be well below the 2 percent rate that I think is consistent with our price stability mandate. Until core, median, and trimmed mean measures of underlying inflation reach 1½ percent on a year-over-year basis, I don't see how we can feel confident that we have escaped the zero-lower-bound risks of the current unpleasantness. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Pianaalto.

MS. PIANALTO. Thank you, Mr. Chairman. Over the past few weeks, I have been hearing more comments from my business contacts about the need to begin thinking about tightening monetary policy. In part, these comments reflect continuing improvements in the economy. But, more importantly, the recent surge in oil prices has heightened concerns about inflation.

I realize that we have differences of opinion about the outlook for GDP growth over the next few years, but I think the growing public attention on inflation merits a careful review of our inflation projections. So this morning I am going to focus my comments on why I expect core inflation rates to only drift up gradually from current levels and to remain below 2 percent for the next couple of years.

I see three key pieces of evidence to support my moderate inflation outlook—the current low underlying inflation rate, limited pass-through of commodity prices, and low inflation expectations that are embedded in financial markets. On the first point, the current low underlying inflation rate, we have only recently seen clear evidence that the disinflation that started in late 2008 has ended. I could use a variety of statistics to make this point, but I think the median CPI illustrates this point particularly well. As recently as late 2008, the median CPI

was running at 3 percent. It bottomed out in the third quarter of last year at just  $\frac{1}{2}$  percent, and today the increase in the median CPI stands at 0.8 percent. While the disinflation trend appears to have ended, the median CPI and other core inflation measures have bottomed out substantially below 2 percent. In light of the fact that history shows us that core inflation is highly persistent, and research has shown that core measures are superior predictors of future inflation, this is one set of reasons that I think underlying inflation will likely remain moderate.

On the second issue of commodity prices, my staff conducted an analysis of the effects of larger-than-expected increases in energy and commodity prices that persist through 2012. Their results show only limited effects from these persistent shocks on core inflation. These results are consistent with the estimates from models like FRB/US and the one that President Evans used in his memo. The most important result from these analyses is that this Committee has time to offset any upside surprises in inflation if we were to see such a scenario develop. The modest pass-through reflected in my inflation forecast is also consistent with the anecdotes that I am hearing from my business contacts. My contacts have been talking a lot about trying to pass along input price increases. And while many businesses would like to pass on commodity price increases, my business contacts have also revealed that there are important limits to pass-through. The CEO of a construction firm reported that many construction contractors are simply eating cost increases because of the hypercompetitive construction market. His view is that some of these contractors will not make it, but they also would not survive if they raised prices. A plumbing fixture company described in detail the engineering process that allows them to experience a large increase in copper prices and then, through efficiencies and product redesign, convert that into minor price increases at the wholesale level. At that point, they evaluate how much of a price increase a particular customer will tolerate, and right now it's not much. I read

the comments from my business contacts as indicating that, yes, firms are interested in passing on price increases, and some are succeeding. But the dynamics that limit pass-through help to explain why consumer price increases have been so limited after months of commodity price increases.

Turning to inflation expectations, my third point in the inflation outlook, the big worry is that if commodity prices persist, they could push up long-term inflation expectations, leading to higher core inflation over the medium term. This is well represented in the Tealbook's "persistent rise in inflation" scenario. In addition to monitoring inflation expectations five and more years out, I like to consider the expectations over a policy horizon of just three years. The Cleveland Fed inflation expectation model identifies inflation expectations, real interest rate, and risk premium components over a three-year horizon. Our model shows that inflation expectations remain low, although expected inflation over the next three years does show an increase of 30 basis points from December to March for the headline CPI. However, that 30 basis point increase is front loaded, with most of the inflation expectations increase occurring over the next 12 months when we would expect pretty significant headline inflation numbers, just on the basis of recent energy prices. In fact, since December, our estimate of inflation expectations for the coming 12 months has increased by nearly  $\frac{1}{2}$  percentage point. In the next two years, though, expected inflation stays 20 to 30 basis points below 2 percent.

I think the evidence that I have discussed supports a baseline outlook where underlying inflation is only gradually increasing. However, I certainly recognize that the risks to the inflation outlook are numerous, and that they may be growing. The heightened inflation concern expressed by some of my business contacts is worrisome. These views may make inflation expectations more volatile, particularly when the nation is facing significant, if likely transitory,

commodity shocks. This concern has caused me to shift the balance of risks on inflation to the upside. The risks to the outlook for economic growth have also expanded with the tragic developments in Japan and continued unrest in the Middle East. However, with the recent labor market news surprises to the upside, I still see the risks to growth as balanced. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. Economic conditions in the Third District continue to improve, even though some of us were snowed in in January. Manufacturing has been particularly strong. The general activity index of our Business Outlook Survey hit a seven-year high in February, surging from 19.3 in January to 35.9 in February. The March data, which will be released this Thursday—so it is embargoed until then—show another strong jump from 35.9 to 43.4. This is the highest reading for the general activity index since the early 1980s. The survey is showing broad strength across the board. The index of new orders in March jumped from a high level of 23.7 in February to 40.3 in March. Indexes for shipments and employment all continue to be in strong territory and have been rising for about six months now. The future activity index, which asks questions about activities six months from now, surged very strongly in March from an already high level. I would caution, though, that the survey was taken before the tsunami and before the turmoil in Japan, so we would have to temper that interpretation. Nonetheless, it was a very strong reading about expectations going forward. Some contacts credited global markets as drivers for new demand, and, in fact, in some instances rising global prices have made local firms more competitive, allowing them to reclaim work previously lost overseas. Our Beige Book contacts indicate that retail sales, including autos, have been rising on

a year-over-year basis. Even though bad weather in January kept buyers away, many auto dealers used clearance sales in January to boost sales.

Labor market conditions are firming in Pennsylvania, where employment has risen at an annual rate of about 0.7 percent over the past three months and the unemployment rate has fallen to 8.2 percent. The rebenchmarked data indicate that employment levels in the District are slightly higher than originally reported. Employment growth in New Jersey and Delaware are not quite as robust, but Delaware, in particular, is a small state, so the readings can be quite volatile.

My staff's state coincident indicators, which summarize economic developments, indicate that activity over the past three months has strengthened in Pennsylvania and New Jersey in particular. The staff's leading indicators indicate activity in the District is projected to continue to improve over the next six months. Business contacts remain optimistic about the future. Many are now saying that business is "good" or "strong." One electrical machinery manufacturer told us that he will break ground on a new plant expansion in April. They do expect exports to be a major source of future revenue going forward.

At our last meeting I talked about the emerging strength of increased price pressures. These have continued to develop over the intermeeting period. In February, prices-paid and prices-received indexes in our manufacturing survey hit their highest levels in three years. The data from March showed further increases, continuing that trend over the past several months. There is a growing indication that firms have some ability to pass on these prices to customers. In response to a special question in our February survey, more than 57 percent of the manufacturers said they had already put through price increases since the start of this year. The most common increase was 3 to 4 percent, but some firms reported very large increases. In

response to a different question, nearly 60 percent of all respondents said they planned to increase prices over the next three months. Given the recent increases in energy and commodity prices, I expect more firms are going to be willing to test their pricing power, particularly as concerns about the recovery's sustainability abate. Thus, I see inflation risks as clearly to the upside both in our District and in the U.S. economy more generally.

I also note that the Tealbook has revised up its forecast of both total and core PCE from January. So far, inflation expectations have remained anchored, though we need to be vigilant to make sure they continue to remain so. I would suggest that if the rise in oil and commodity prices appears to be passed through to other prices, and we thus see a rise in all prices or core prices, that will occur because monetary policy is accommodative. While this might mean that there is just a one-time increase in the level of prices as monetary policy allows all prices to rise with the higher oil prices, it could become more damaging if, in fact, during that transition, expectations of inflation begin to change. Then our responses would be much more difficult.

As the Tealbook alternative scenarios clearly show, the low level of pass-through of large price increases is contingent upon expectations of inflation being well anchored. The alternative scenario in which long-run inflation expectations are more sensitive to this persistent rise in headline inflation is a pretty ugly scenario, with core PCE inflation reaching 3¾ percent in 2013 and remaining there for at least the next two years, the end of the forecast horizon. Economic growth is significantly lower and the unemployment rate is significantly higher than in the baseline. I don't think we should take the possibility of this outcome as trivial. The current experience in the United Kingdom, and to a lesser extent, the EU, as we were talking about earlier, where inflation is rising in spite of what appear to be large output gaps, should make us at least somewhat uncomfortable about relying on these gaps too heavily to control the inflation

process for us. After all, as Dave Stockton noted, gaps really do have only a small predictive content for inflation—not zero, but relatively small—and thus large movements in inflation remain unexplained by such models.

I have made little change to my forecast. The situation in Japan after the devastating earthquake and tsunami is serious. The nuclear reactor risks have created even more uncertainty. However, at this point, it is difficult to see exactly how this situation is going to resolve itself, or how it will impact global economic growth and the United States. I do believe Japan has the capacity to overcome this tragedy and recover. For now, I continue to expect output growth in the United States to be above trend over the next two years, employment growth to strengthen, the unemployment rate to move down gradually, and inflation to move toward 2 percent. The outcome of my forecast is similar to that of the Tealbook, but I have a somewhat steeper policy path to go along with it. I believe we will need to tighten policy considerably sooner than in the Tealbook, even though the Tealbook's revisions have moved the liftoff two quarters earlier than their January forecast. The Tealbook now has liftoff in the third quarter of 2012. But if we are to ensure that inflation expectations remain anchored, I think we will need to start reversing course well before the end of this year, if the forecast plays out as imagined in the Tealbook.

Taylor rules based on growth rates, rather than gaps, suggest that monetary policy is about right now. But as economic growth accelerates this year, policy will need to start tightening. We need to begin preparing for that time by discussing what our exit path will look like and communicating that strategy to the markets. We will need to prepare them for the exit before we implement it. I will have more to say about that in the policy go-round. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. I just want to comment that we will be talking about the exit strategy at the next meeting. Bill, is that correct?

MR. ENGLISH. That's right.

CHAIRMAN BERNANKE. President Kocherlakota.

MR. KOCHERLAKOTA. Thank you, Mr. Chairman. In general, the Ninth District economy is on a better path than the national economy. Unemployment is below 7 percent in the District. Some of this is driven by the oil boom in North Dakota where employment grew by nearly 5 percent last year. But even in the much more diversified economy of Minnesota, unemployment is now down to 6.7 percent. So this follows up on President Bullard's point that there is considerable heterogeneity even among U.S. states in their unemployment experience.

More generally, there is confidence in the Ninth District in the recovery. Firms have more certainty about federal taxes in the wake of the election and the subsequent fiscal deal. They are less worried about the ultimate impact of the health care reform. And as President Evans observed, their complaints about incipient regulations seemed less vigorous than in the past, although I would say there is one group that would distinguish themselves in that: We had our first meeting of our Community Depository Institutions Advisory Council, and the bankers in that group were fairly quick and vigorous in their complaints about regulation. So there are people out there that will complain about regulation.

This optimistic frame of mind means that many firms seem ready to expand hiring. Firms see little or no pressure on wages over the next year or two, but some do plan major price increases by the end of 2011 in response to increases in other input costs. At the national level, I found the discussion of labor force participation on pages 11 and 25 of Book A of the Tealbook to be thoughtful and useful. For me, it highlighted the challenges of predicting the evolution of

labor supply, and, hence, labor market slack, over even a relatively short horizon like 12 or 24 months. When you look at the graph on page 25 of Book A of the Tealbook or the graph on page 11 of Book A of the Tealbook, the Tealbook is basically predicting an uptick in labor force participation and a reversion to a trend that is fitted to data that go back about 10 years. The question is: Will we see that uptick or not? I agree with the Tealbook that there are definitely reasons to expect that the answer to the question might be yes, but I think there is also evidence that is just the opposite. As we all know, unemployment fell from 9.8 percent in November to 8.9 percent in February, which is the same as it was in April of 2009. In an accounting sense, more than half of this decline can be attributed to people who left the labor force. The question for us that's important in terms of slack is: Should we expect those people to return to the labor force, putting downward pressure on wages and prices as the economy improves, or not? One way to try to get some insight into this question is to look at the U-5 unemployment series. This is a broader measure of labor force underutilization that includes people who have not looked for work in the past four weeks but report themselves as, nonetheless, ready to work. Presumably, these are the people who are most likely to reenter the labor force as the economy improves. They are sometimes referred to as being marginally attached to the labor force. If you look at the U-5 unemployment rate, it has mimicked the behavior of the standard unemployment series. It too has fallen sharply over the past three months to return to roughly its April 2009 level. My conclusion from that—and if you break down the series into more components, you could reach the same conclusion—is that relatively few of those who have left the labor force during the past three months view themselves as being marginally attached to the labor force. This is all in an accounting sense, of course, but those are the conclusions you would reach from looking at the U-5 number. This is very suggestive, and I would only say that it leads me to be uncertain about

the path of labor force participation. And, these uncertainties translate directly to uncertainty about any measure of labor market slack that we use to gauge the appropriate level of monetary accommodation.

This issue about what slack is will become really important. For example, if you look at the Taylor rules on page 37 in Book B of the Tealbook, set the slack terms there to zero, and just think about inflation at 1.2 percent, the results would not be a justification for our current level of accommodation. We would have to have interest rates be significantly higher than the zero lower bound at that point. So the discussion about slack is very critical for justifying our current level of accommodation.

I would say the right way to think about slack is through the behavior of core inflation and the behavior of the forecast of core; that's likely to prove a more reliable gauge. In particular, what I mean by that is if you look at the Taylor rule, either the 1999 one or the 1993 one, the last term is this  $y$  minus  $y^*$  piece. My uncertainties about labor force participation mean that I think  $y^*$  is hard to measure. And what kind of price setting you follow can give you a different way to substitute in for that, using core inflation as a way to proxy for that. If you are using a New Keynesian model, a scaled version of the difference between core inflation and expected future core inflation is the right way to proxy for that in the simple, crudest versions of those models. In late 2010, that difference was a big negative number, because core was so low. But I expect that difference to be much closer to zero by the end of the year, because forecasts of 2012 core are likely to be real close to realized 2011 core. If you are a fan of the NAIRU models, you could replace that  $y$  minus  $y^*$  by a scaled version of the acceleration of inflation, the difference between current core and lagged core. In late 2010, again, that difference was a big negative number, a good justification of our accommodative monetary policy. But I expect core

to be along the lines of the Survey of Professional Forecasters done by the Philly Fed. I expect that core inflation will be between 1.4 and 1.5 in 2011. That means that difference between annual core inflation and lagged annual core inflation will be close to 70 basis points by the end of the year. I continue to expect by the end of 2011 reliable measures of slack will not support our current level of monetary accommodation. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Williams.

MR. WILLIAMS. Thank you, Mr. Chairman. It is a great honor and privilege to be here. My immediate predecessors in this seat left big shoes to fill, both in terms of intellect and wit. Regarding the latter, I expect I will fall well short in my ability to integrate references to cultural icons like Lady Gaga into our discussions. I do promise, however, to keep my comments about control undergarments to the bare minimum. [Laughter]

The intermeeting data have been mixed. On the positive side, the ISM survey has been very strong, especially in manufacturing, and auto sales surprised to the upside. The drop in the unemployment rate over the past three months has also been very encouraging. On the downside, real GDP growth, both the last quarter and the current quarter, now look to be about ½ percentage point weaker than we were expecting at the time of our last meeting. A portion of this downgrade may be due to unseasonably bad weather. Still, my business contacts express little enthusiasm about the pace of spending. Consumers appear very cautious about buying certain big-ticket items, such as furniture and appliances, in part because rising gasoline prices are draining their purchasing power and undermining their confidence. Looking ahead, we trimmed our forecast for GDP growth this year by about ½ percentage point to about 3½ percent. This downward revision reflects the somewhat more subdued tone of recent data and also the greater likelihood of near-term fiscal restraint from the recent spike in oil prices.

Fiscal retrenchment is evident in all levels of government. State and local governments have cut employment and compensation and increased taxes. And at the federal level, the budgetary endgame is not at all clear, but recent developments point to a bit less fiscal impetus, and deeper cuts and even a temporary government shutdown cannot be ruled out.

The other notable factor restraining economic growth is the jump in oil prices. Various estimates using a range of methodologies suggest that the recent rise in oil prices will reduce real GDP growth this year by a few tenths of 1 percentage point. Indeed, the consensus on these estimated effects is one of the very few things that macroeconomists appear to agree on. Given the ongoing turmoil in North Africa and the Middle East, there is a risk of another jump in oil prices, which of course would further slow the recovery. On inflation, increases in oil prices are causing a sizable bump in the headline rate, but I don't expect that to last for long or leave much of an imprint on core inflation. Again, the research literature is in remarkable agreement that oil price shocks have a minimal effect on core inflation in the post-Volcker period. President Evans's memo, which I greatly appreciate, confirms this.

Another potential concern on the inflation front comes from rising non-oil import prices. Indeed, my business contacts all tell me they expect sizable increases in prices of imports, especially from China this year. They also say that they will try to pass on these increases to consumers, although their conviction on this wavers regarding whether they will be able to make these increases stick, given the weak economy. In any case, it is important to remember that imports account for only about 13 percent of the value of total consumption based on input-output relationships. Perhaps more surprisingly, imports from China account for only 2 percent of U.S. consumption. Even for clothing and shoes, which are very import-intensive, only one-third of value added is imported. The rest is domestic factors, including distribution and retailing

margins. So despite the increases in non-oil import prices, with 87 percent of consumption reflecting domestic factors—notably, U.S. labor compensation—I don't anticipate that we will be importing a significant sustained rise in inflation. Instead, we revised our core inflation projection up only modestly over the forecast horizon. This revision primarily reflects a projected lower path for the unemployment rate going forward, and, therefore, somewhat less slack.

Following the discussion of structural unemployment last time, my staff has reexamined the benefits of using slack to forecast inflation. This question has been a subject of considerable analysis and debate, both in research journals and at this table, of course. Resource utilization is difficult to measure, and in normal times the effects of output or unemployment gaps on inflation are frequently dominated by other factors, such as supply shocks. But in the current circumstances, when utilization rates are far below normal, the effects of slack, I think, are more evident. One way to gauge the importance of slack is to compare the forecast performance of forecasters who use slack with those that do not. My staff has done just that, using the fact that respondents to the Survey of Professional Forecasters report whether or not they use a NAIRU concept in forecasting inflation. For the past three years, SPF forecasters who do use a NAIRU have been about 30 percent more accurate in forecasting core inflation than the forecasters who don't. This accuracy advantage is consistent with research presented by Jim Stock and Mark Watson at last year's Jackson Hole conference. They show that measures of slack do help forecast inflation after recessions. And given the significant amount of slack in the economy today, I expect core inflation to remain low, averaging slightly above 1 percent this year and next. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Our Fifth District contacts have struck a tone of greater optimism in the comments we've heard over the past several weeks. Consumers seem to be more confident. For example, sales of ski passes have doubled at a Virginia ski resort, and advanced bookings at coastal resorts are coming in strong. Several auto dealers have experienced an uptick in business as well. One dealer reported allowing more customers to walk away over price negotiations, confident that other customers will be willing to pay the price they want. In fact, most business sectors are improving, and they convey a real sense of firming demand for their products that goes beyond mere inventory restocking. We have also heard of expanding capital budgets to undertake investments that were postponed during the recession and early stages of the recovery. Even in the commercial real estate sector, some companies are revisiting expansion plans that had been set aside, and although decisions may still be several months off, they're making preparations for work to begin later this year or early next year. Finally, we hear that many businesses have started hiring workers or expect to hire relatively soon to meet their increased orders.

News from our contacts was even more heavily dominated this time by reports of rising commodity prices stemming from increased global demand, and while some are absorbing increased costs through reduced margins, many are passing through these higher prices or have plans to do so in the near future. The ability to pass these costs along seems related to a lack of competition in some instances or, in other cases, the sense that the entire industry is making similar moves despite fear that demand may be affected. As an example, our sources in the textile industry report that they have had to raise prices even though customers resist, and they cite industry expectations of substantial demand destruction. Two aluminum extruders reported passing along their higher raw material costs, and while one of them cited some competitive

pressures that might limit further increases, the other stated that the loss of competitors in the industry during the recession had diminished overall capacity by 20 to 25 percent, which made them more optimistic about being able to pass along cost increases.

Domestic oil price developments since our last meeting and the uncertainties emanating from both the Mideast and Japan seem to have tempered the near-term growth outlook a bit, but I agree with the Tealbook in seeing little effect beyond the near term. A wide array of signs continue to indicate a broad acceleration in economic growth under way. Household spending continues to show, I think, decent momentum despite horrendous weather and a sharp climb in energy prices. Business investment in equipment and software continues to show strength. Both of the ISM indexes are at lofty levels; payroll employment is picking up pace as well.

As for inflation, the core numbers remain quite modest. Year-over-year core PCE is up just 0.8 percent. If you'll forgive me, I'll commit the sin here of mentioning the three-month inflation rate: Three-month core inflation has been rising and is now 1 percent. I think we should be mindful of the risk that core inflation increases quite rapidly in the near term. Anecdotal reports about the desire to pass on input price increases to customers are ubiquitous; a lot of us have talked about this around the table today. Of course, just wanting to pass on price increases doesn't mean firms will actually try to do so, or, even if they do, that they'll be successful in making the prices stick. I think that's reflected in a lot of the uncertainty many of you have conveyed about your firms' prospects, whether they think they actually can pass on those price increases. But if consumers and firms expect widespread price increases, we may see it happen. If they expect widespread pass-through, it may actually come to fruition. Indeed, we've seen one-year-ahead inflation expectations in the Michigan survey rise quite sharply since last year, up from 2.7 percent in October to 4.6 percent for this month. And in the last two

months, short-term TIPS breakeven spreads have risen beyond what I think would be implied by energy prices alone.

I think that current expectations about commodity price pass-through could be shaped in part by the experience of 2003 and 2004, when the 12-month core inflation number rose from 1.4 percent near the end of 2003 to 2¼ percent in the space of just nine months, a relatively sharp acceleration. Then, as now, the economic recovery had been disappointingly slow for some time, but it was gaining firmer footing toward the end of 2003. Then, as now, disinflation had been the FOMC's major policy preoccupation just a few months earlier. Then, as now, energy prices had been rising fairly rapidly, driven by a surging growth in emerging markets. And then, as now, the Greenbook, as it was then called, was projecting that the energy price surge would be temporary after which inflation would fall back down to around 1 percent mainly because of the large output gap they saw as weighing down on inflation. The Greenbook estimate of the output gap in late 2003 was minus 2 percent, and a negative gap was expected to persist over the eight-quarter forecast horizon. Instead, we saw core inflation ratchet up pretty rapidly and remain about 2¼ percent for the rest of the expansion, and what is worse, as I mentioned earlier, overall inflation averaged 3 percent for the following four years, from the end of 2003 to the end of 2007.

From a business's point of view today, you can see why this might be an opportune time in the business cycle to push through price increases. They've been hunkered down for several years now. Demand has been relatively low. Their margins have been compressed. They've been squeezing out costs. A lot of spare capacity has been eliminated from their industry. When overall industry demand picks up, it's plausible that the elasticity of demand for their output will fall, and they can expand margins again. So in that context, I think it's worth considering what

the typical business is hearing about the overall inflation outlook that might influence their expectations about how widespread such pass-through is going to be, including what they're hearing about inflation from us. But I'm going to save that discussion for the policy round.

Thank you very much, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. The Eighth District economy continues to expand at a moderate pace. District business contacts remain optimistic for 2011, but possibly slightly less so than at the time of the last FOMC meeting. District employment growth was not as strong as the nation as a whole during the October to December time frame, but District unemployment for 16 metropolitan statistical areas has been running somewhat below the national unemployment rate. Foreclosure rates are rising in the District, but remain well below national levels. Some businesses are clearly planning on hiring new workers in significant numbers during 2011. This is especially so for large businesses with sizable cash holdings. These businesses have been profitable and are looking for ways to introduce new products and expand market share.

Commodity price movements are a clear cause for concern in the District. I, as others here, received an earful about that during the intermeeting period. Industrial businesses and agricultural firms worry about input costs and profitability. Retailers worry about pullback by households. One convenience store retailer reported that gasoline volume growth had slowed but had not yet turned negative despite the sharp rise in prices in the last few weeks.

The combination of an improved outlook for 2011 along with rising input costs has many business leaders uneasy about price increases. Some intend and expect to push through price

increases in their own product lines this year or very soon. Many think a bout of inflation may be brewing.

In the national context, the U.S. economy continues to have reasonably good prospects for 2011. I continue to expect above-trend growth for the year, along with an attendant improvement in labor markets. As always, there are risks: developments in North Africa and the Middle East are one; the European sovereign debt crisis remains as another; possibly the recovery from natural disaster in Japan, as news comes in on that; and certainly, the U.S. fiscal situation as well. In each case more negative developments would have to transpire before material threats to the U.S. economy would be realized. In particular, in my view, oil prices would have to go higher persistently before they'd really threaten the U.S. recovery, or Europeans would have to fail to reach agreement on the sovereign debt situation. Again, I was encouraged by the developments last Friday on that dimension.

On oil prices, I would stress that this is not a "Hamilton" oil shock, at least not yet. Jim Hamilton is well known for being the guru of oil price shocks. He has a special way that he wants to measure that variable. The current rise in oil prices is nothing like what you'd need on that metric. Of course, you could say, "I don't like his variable," but he constructed that variable in order to get empirical significance and to tell the story that you'd like to tell about oil price movements and the effects on the U.S. economy. I think everything that's going on with oil depends on what happens going forward, and it is not as large as other oil price movements, at least not yet.

In the absence of further developments, the outlook remains decidedly improved from last autumn, and that's why I think we should be contemplating, but only contemplating, the long journey back to a more normal monetary policy this summer and fall. In my view, quantitative

easing has been quite successful in that it convinced markets that this Committee is unwilling to allow the United States to slide into the zero-nominal-interest-rate, mildly deflationary equilibrium that was potentially on the horizon last summer and that Japan has experienced over the last 15 years.

Since we embarked on QE2, many measures of inflation have bottomed out and turned higher, and market-based measures of expected inflation have definitely turned up. The five-year TIPS expected inflation rate was 120 basis points and falling during the summer. It has recently been as high as 230 basis points. Indeed, according to the recent TIPS market, this Committee is set to miss its implicit inflation target of 2 percent or so on the high side at any horizon: 2 years; 5 years; 10 years; or 5-year, 5-year forwards. I take this as a measure of success at this juncture, but I would not want to overstay our welcome and allow these expectations to go higher. Let me stress, then, that I do not regard the TIPS expected inflation measures as unacceptably high at this point. But they have been rising and will probably continue to rise this year if the economy performs as well as we forecast it will and if there are no further downside shocks that materialize in the meantime. Of course, all bets would be off if that occurs.

The following combination gives me pause: one, a relatively strong outlook for the U.S. economic growth; two, rising inflation expectations beyond our implicit inflation target; and three, an ultra-easy monetary policy that will take a long time to normalize. This combination could potentially lead us to be behind the curve if we're not very careful going forward.

Two recent developments also give me pause. One is that the ECB looks set to tighten this spring. This took me by surprise. Euro-area harmonized unemployment is 9.9 percent, a full percentage point higher than what we have. Now, to be clear, the low on that measure over the

last 10 years was 7.2 percent, and over the last 18 years or so, it's almost always been above 8 percent. Still, it seems like there's a lot of slack in Europe. Also, the HICP, the Harmonized Index of Consumer Prices, the ECB's preferred price measure, is just slightly above 2 percent year on year. With inflation more or less at target and quite a bit of slack in the economy, it did take me by surprise that they're planning on tightening. But my reading is that the ECB is saying that it is taking a step toward normalizing policy with the understanding that policy will still be very accommodative even after it takes a move in that direction.

The other recent development is associated with the Middle East turmoil and the dollar. We did not see the flight-to-safety effect as strongly as I would have expected coming from the Middle East turmoil. So this is the dog that didn't bark. I wouldn't make too much of it at this point, although I thought it was a little suggestive that the United States has used up some credibility on inflation.

These two developments suggest to me that we should be prepared to signal markets through concrete action that we are willing to begin the process of removing policy accommodation. I wouldn't do it now, but in the meetings ahead. Even if we begin to remove accommodation policy, it will remain ultra-easy. As I've said many times before, I don't think the first move should be on rates. I regard that as unnecessary given our balance sheet policy. Instead, I think we should take steps to shrink the balance sheet first. One way to do that would be to pull up a little bit short with QE2—not at this meeting, but at the next meeting.

Let me make a very brief comment on President Evans's fine memo. I thought it was very nicely done, and I really appreciate the work. I think it helps make the debates here more transparent. I thought it was exceptionally clear. It helped me think about the issue of the appropriate policy response to an increase in commodity policies. As it says in the memo, I still

think we need a more structural framework to get to the bottom of this issue, and I will try to provide a few comments on this through the SDS comment process going forward here.

Let me make one further comment, and I will be done. It's on core versus headline. A lot of the discussion here, I think, makes core be an end in itself. I think that that is problematic for the Committee. We only care about the prices that households actually have to pay at the end of the day. So core can only be a vehicle to an end, it can't be an end in itself. Let me stress that since the year 2000, core and headline price indexes have actually diverged. Headline inflation since 2000 has been about 25 percent. This is either PCE or CPI. Core inflation, since the year 2000, has been about 21.5 percent. It's 25 percent versus 21.5 percent, a 3½ percent difference in the levels of those indexes over that 11-year period. Too much focus on core is telling the median household that they are richer than they are by 3½ percent. The households unfortunately are not fooled. They have to pay those prices, and they know that they're not 3½ percent richer than we're saying that they are. Thank you.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Thank you, Mr. Chairman. I'm going to comment on three things: first, on my District, where activity remains robust; second, on inflation, where I am wary—and a little comment on overall economic activity for the nation; and third, I want to conclude with comments on the financial markets, where I see disturbing signs developing. In all of those areas, I will not comment on Lindsay Lohan.

As far as my District is concerned, I reported last time that payroll employment had risen at an annual rate of 3 percent in December. It continues to rise at that rate, and, in fact, we see it accelerating. Temporary employment rose at an almost unprecedented 29.1 percent annual rate in December; we see that trend continuing. And construction employment, very importantly,

rose at a 22 percent annual rate in December; we see that trend continuing. And interestingly, convenience store sales, where the average purchaser is a 27-year-old Hispanic in my District, have seen sales pick up by 7 percent year to date. So we see increased activity in the construction sector.

If you update the figures on employment through January, with all due respect to my colleague from Minnesota, there are, as you pointed out, regional differences. I was going to declare Texas to be the “Bavaria of the United States,” but that may go to Minnesota. However, given the numbers that we have, year-to-date total nonagricultural employment in terms of our share of employment growth in the United States is roughly 50 percent—49.5—for the month of January. In terms of the numbers employed in the services sector, Texas accounts for 78.9 percent of the employment growth in January. So we continue to steam along.

Our leading index recently rose to its highest level since the third quarter of 2008. We looked for negative signs. One of the negative signs in our surveying is that prices-paid indicators continue to rise, with a growing number of firms planning to pass along price increases to customers later this year, and I will comment on that a little bit further when I talk about my national economic survey. We do have a negative, of course; like all states, we have a budgetary imbalance. I fully suspect, given Texas’s tradition, that they will take it out of education and health care and not in increased tax revenues.

As far as inflation is concerned, I do want to point out a couple of things. Our trimmed mean suggests that December’s underlying rate was not quite as low as that indicated by the core, and that January’s rate was not quite as high as indicated by the core measurement that we more typically use. Our trimmed mean PCE is running at about 1 percent, similar to December’s 1.1 percent. The 6- and 12-month trimmed mean rates are holding steady at 1.1 percent and

0.9 percent respectively. Both the Dallas and the Cleveland trimmed mean have shown upward drift, however, on the 6-month horizon. There is one change, and that is that January's Dallas trimmed mean showed the lowest level of items registering price declines since the inflation scare of August 2008, and this is for the third straight month. The number of items showing price declines was roughly 30 percent of the basket.

With regard to pass-through and the comments that were made, I remain a little bit wary. For example, processed foods. One company I surveyed at the beginning of the year was budgeting \$800 million in inflation increases. They just revised that at their board meeting last week to \$2 billion, and they expect to pass through whatever they can pass through because the prices of processed food appear to have some leeway in terms of the pricing for consumers.

In apparel, if you look at the data that were recently released by MasterCard SpendingPulse, we have seen a 3 percent increase in each of the last two months. The price of apparel has decreased for 20 years. Every retailer I surveyed—big box or lower- or higher-income quartile, across the spectrum—is pricing in increased prices, mainly because of the price of cotton or its nearest substitute, which is paraxylene. In terms of even those products that we would consider to be nonrelated to raw material price increases, I find it interesting that AT&T has moved every single price category forward and priced in price increases. So I think we need to be a little bit worried about the assumption that non-oil commodity prices are not having an effect on business expectations. I think President Lacker talked about that quite correctly, and I would second some of the points he has made. We're building in a mindset here that may, indeed affect expectations as well as the reality of inflation.

With regard to wage pressures, in our Eleventh District surveys and our Beige Book survey, we find that higher wages are being reported by some high-value-added firms,

particularly in accounting, in airline and aviation, and in high-tech manufacturers, all of which are reporting slight increases in wage pressures for highly skilled positions. So I think this is something we need to watch carefully.

Last, on Japan, and this may be affected by my having lived and made a business there for a period of time, but the devastation is overwhelming. Almost all raw materials are imported in Japan. You add to that the price pressures—even though they seem to be somewhat abating with somewhat slower growth in China—on steel, which is up 14 percent year to date, or the prices of imported protein, or, as you pointed out, the price of semiconductors in terms of the constriction of supply, or the supply of autos likely to come out, referencing back to the comment on Ford Motor Company, and I view the developments in Japan as having an inflationary bias. You have to remember how relatively isolated and how export driven that economy is, and the fact that they are extremely dependent on imported goods. So whether it's lumber, steel, or other inputs, or the output that they produce, I would expect there will be constraints and inflationary pressure.

Let me conclude by commenting on the financial markets. Again, I think we're seeing signs, Mr. Chairman, of increasingly imprudent risk-taking. We've seen a surge in covenant-lite loans. Thirty billion dollars have been issued in the first two and a half months of this year. That compares with \$24 billion for all of 2006 and \$100 billion total for the boom year of 2007. There have been \$15 billion in year-to-date dividends—payouts by private-equity-controlled companies, all using leverage. That equals the running rate of last year, which was a record year. Payment-in-kind toggle notes, or PIK toggle notes, as they're known, are an increasingly active methodology employed in the market. According to the March Senior Credit Officer Opinion Survey on Dealer Financing Terms, which was reported on page 69 in the Tealbook, traditionally

unlevered managers, insurance companies, and pension funds are increasingly using leverage through OTC derivatives and repos, and the same can be said for hedge fund activity. Retail investors are plowing fresh money into equities at the highest pace in two and a half years. The current rally that we have just experienced is the sixth richest on record, going back to 1932, and the third most rapid. By the way, the two that were even more rapid were in 1932 and 1933, which I find of interest.

Crude oil noncommercial futures contracts are climbing dramatically, and they're markedly higher as the oil trades are at ever higher prices. I think that's something we should monitor. And just to put this in perspective, the total volume outstanding on the NYMEX and the ICE, which is the Intercontinental Exchange, now exceeds six times the storage capacity of Cushing, Oklahoma. This can cut both ways, but this activity has accumulated momentum and accelerated as prices have gotten higher, and the fact that Cushing, Oklahoma, inventories are abnormally clogged up because you can't release from Cushing as much as you're taking in means to me that we have to be extremely wary in terms of the volatility that might be created in the movements of these futures markets. Whether or not they're accurate indicators, there certainly is an enormous amount of activity. I believe that activity is undermeasured because it doesn't take into proper account the derivatives that trade off of those markets.

And one more data point from AutoNation and Experion—they show approvals for 38 percent of the subprime customers at year-end. Now, that's not quite 50 percent, which was the level just before the crash, but it's up significantly from the 18 percent average level for 2009.

I would say in summary, Mr. Chairman, I'm seeing signs of the intoxicating ambrosia of cheap money and readily available money. I think it is exacerbating price movements, and it

may well be adding to inflation. As you know, I remain extremely wary as to the utility of the recent round of the \$600 billion-plus in purchases, and I think we have a lot to be mindful of. I agree with President Bullard. Given the pace of activity and the change in the mood that has taken place in the country, we may have to move much more quickly in terms of undoing the monetary accommodation we've provided, which would be a happy case, not a sad case. Thank you.

CHAIRMAN BERNANKE. Thank you very much. It's 11 o'clock. I understand coffee is ready. Why don't we take 20 minutes?

[Coffee break]

CHAIRMAN BERNANKE. All right. Thanks very much. Let's continue the go-round with Vice Chairman Dudley.

VICE CHAIRMAN DUDLEY. I feel like I am going to be the proverbial two-armed economist today. On the one hand, even though real GDP in the first quarter looks to be somewhat weaker than we expected a month ago, I think you could also say that the growth outlook remains considerably better than where we were last summer. In particular, we look closer to a virtuous circle in which rising demand boosts employment and income, which lifts confidence and spurs further gains in demand. I think the improvement in labor market conditions is particularly important in this regard. But on the other hand, there are two big new developments on the supply side that give one pause about being too optimistic about both the growth and the inflation outlook. The first risk, of course, is that oil supply disruptions lead to a further increase in oil prices. The good news is that Saudi Arabia still has considerable excess capacity and has indicated a willingness to use it. The bad news with respect to the oil price outlook is the high level of uncertainty and the likelihood that the tails are fat. I find it very hard

to be confident about what is going to happen next. Is this a temporary upward blip that will be reversed as soon as the Saudi oil production fills the gap? Or is this just the early stage of a much more substantial shock as political instability spreads? Even in the more benign scenarios, as the Saudis pump more oil and their excess capacity shrinks, there will be less room to absorb other shocks. For example, what is happening to the Japanese nuclear electricity generation capacity is another shock. And, of course, if Saudi oil production itself were to be disrupted for any reason, then we would be in a very tough spot.

Similarly, on the inflation side of the ledger, on the one hand, price pressures remain muted outside of commodities, and wage trends remain soft. But on the other hand, I am becoming more worried that inflation expectations could become unhinged. There are four factors that are causing a little more anxiety on my part. First, the commodity price pressures that are already in train are likely to push headline inflation, as measured by the PCE index, above 2½ percent on a year-over-year basis by the middle of this year. Although this increase will likely prove temporary, I think it still could, nevertheless, have consequences for our credibility, especially if other countries are responding to similar pressures by tightening their own monetary policies.

Second, consumers, as I found out in Queens last week, generally believe that prices are rising considerably more quickly than inflation statistics. [Laughter] People see higher prices every day when they go to the grocery store or the gas station, so even though we rely on the reported inflation statistics, the beliefs of the average consumer are quite different. And I think that's potentially important for our credibility as well.

Third, we already see some updrift in inflation expectations. Although the TIPS five-year, five-year forward measure has increased only very modestly, the most recent reading of the

University of Michigan consumer inflation expectations is more disturbing. I could take a little bit of consolation from the notion that some of this always happens when there is a big increase in gas prices that shows up in the 1-year measure, but then some of it drifts into the 5-to-10-year measure. But it is a pretty big increase; it is the highest level since August 2008. In New York, we run a separate survey; our longer-term measure, which is a 2-to-3-year forward inflation expectations measure, has also drifted up, but not quite as much as the Michigan survey. In that survey, consumers are also showing more uncertainty about what inflation is going to be in future years.

The fourth consideration is that this is all happening at a time that we are doing monetary policy in a very different way, where our balance sheet has expanded very sharply. Even though I think the interest on excess reserves is a tool that will be completely sufficient to keep inflation in check, there are people who are much less confident that that tool will work. So our enlarged balance sheet I also think is a factor that potentially threatens to undermine our credibility, even if we are actually right that the IOER is sufficient. I think that points to us doing a better job to educate people about our ability and determination to use the IOER rate when the time comes to restrain credit demand. I think we can do a better job on that front, actually, making the case that we have the tools, because we have not completely solved that problem yet.

Another risk area that Nathan touched on is what is going on in Europe. The euro sovereign debt/banking crisis isn't over by a long shot yet. I think on the positive side of the ledger, as Nathan pointed out, the EFSF has been bolstered. I think another positive is that Spain has made some progress in differentiating itself from some of the more troubled European sovereigns. In Europe, we hosted a luncheon on Friday for the Spanish minister of finance and the governor of the central bank, the Bank of Spain. We brought in a bunch of investors, and I

think the officials made a pretty good case that Spain is different from the other peripheral countries. For example, they pointed out that this debate about how much money the *cajas* need is not really that interesting, because even if they need €50 billion as opposed to €15 billion, that's still well within the capacity of the Spanish government to supply. Second, they pointed out that Spain is actually doing pretty well competitively. They haven't lost any market share in international goods markets, and the country has begun to tackle some of the tough structural problems in terms of their labor market. So that is the good news.

On the side that is not so good, while the financing agreement helps strengthen the financing mechanism, I think a number of things have actually taken a turn in the wrong direction. The first thing that has gone in the wrong direction in Europe is that the political support among voters in the core countries, to provide aid to the peripheral countries to finance their ongoing deficits and refinance maturing debt, seems to be eroding at the same time the willingness of the peripheral countries' citizens to countenance further belt tightening is waning. So we run a risk that we are going to soon get to the point where the leadership on both sides that want agreement can't deliver politically what they need to do in terms of what they want to see happen. I thought it was noteworthy that the new Irish government refused to commit to raise the corporate income tax rate in Ireland in exchange for a 1 percentage point reduction in the financing costs of their rescue package. That told me that positions are starting to harden.

Second, it is becoming increasingly obvious that the debts of some of the peripheral countries will need to be restructured. This creates a bit of a Hobson's choice. On the one hand, failure to move forward on that front in terms of restructuring makes the outlook more murky, and makes it impossible for these countries to begin to tap the markets on their own again on reasonable terms. On the other hand, moving forward with restructuring puts increased pressure

on the banks throughout Europe that have large exposures to these peripheral sovereigns. So they are in a very difficult spot.

Third, there is the risk that the current round of European stress tests will not be imposed in a way that resolves whether the core banks have sufficient capital. Remember, last summer there were stress tests, and those ultimately lacked credibility, because the Irish banks passed the stress tests, and then several months later they were in a great deal of difficulty. A couple of problems have been raised about the stress tests that they are planning to conduct. The first is that they are going to use national definitions of Tier 1 capital that differ quite a bit, rather than a common Tier 1 standard. Also, the press reports that I have read also suggest that the sovereign debt stress that is going to be assumed is not very severe. In fact, it may at times be less stress than what is currently implied by the 10-year government bond yields in some of the peripheral countries. So it's hard to take a stress test very seriously if it's not more stressful than the yields you actually see in the markets today.

And fourth, the market anticipates the ECB will be beginning a tightening cycle at the April meeting. I think that action is going to underscore the growing gap between the optimal policy for the core countries, such as Germany, which I think is actually pretty close to full employment versus the peripheral countries in which economic activity is contracting and slack is actually growing.

At the end of the day, I continue to think that they will muddle through in the end, because I think the commitment of the political leadership in the core countries to Europe is intact. But I think it is going to be very messy.

CHAIRMAN BERNANKE. Thank you. Governor Yellen.

MS. YELLEN. Thank you, Mr. Chairman. The data we have received since our last meeting support the view that the recovery is gathering steam and has become self-sustaining. Private demand, rather than temporary fiscal stimulus or inventory investment, is increasingly powering the expansion. Even so, there are ongoing drags from housing, nonresidential construction, and state and local government spending, along with new downside risks relating to possible near-term federal spending cuts and the negative spillovers from higher gas and commodity prices, and broader uncertainties relating to the Middle East, North Africa, Japan, and the euro area. These risks to the recovery have grown in recent weeks, and they diminish my confidence that we will enjoy smooth sailing ahead.

With respect to private spending, I am encouraged that business surveys and anecdotal reports have taken on a more optimistic tone. Businesses appear far more upbeat about sales and express greater willingness to invest and even hire. These improved attitudes are consistent with the patterns we are seeing in capital spending. Recent signals pertaining to consumer spending have been harder to read, but, on balance, they too point to at least moderate growth in line with disposable income. And surging auto sales suggest a release of pent-up demand.

Consumers are hardly ebullient, but they seem more optimistic and for good reasons. The stock market has recovered, labor market conditions have improved somewhat, those with jobs have less reason to fear losing them, and the burden of debt payments has abated to more normal levels. Further, a tax cut is beginning to show up in paychecks. Of course, declining house prices are a continuing negative for household wealth and borrowing capacity, and the intermeeting evidence suggests that this trend continues unabated.

Anecdotal reports suggest that access to financing, especially for car loans, has improved even for those with poor credit histories, and this may be an additional factor boosting purchases.

Looking forward, though, I am concerned about the vulnerability of consumer spending to further upward movements in oil prices. And in this regard, the plunge we saw last Friday in the Michigan survey's consumer sentiment measure, serves as a wakeup call.

History shows that gas prices are highly salient to households, and rising prices at the pump can quickly affect consumer confidence. In recent weeks, the negative effect of rising gas prices on confidence has apparently overwhelmed all of the positive factors that were and should be boosting confidence. We should expect some toll on spending, because higher oil prices affect not only consumer psyches but also their purchasing power. Auto purchases could be especially vulnerable.

Turning to the labor market, I see hopeful signs of improvement. Employment is rising in both the establishment and household surveys, initial claims have declined, and an increasing fraction of firms indicate an intention to add to their payrolls. That said, like President Evans, I am skeptical that conditions have improved and slack has diminished by quite as much as Tealbook assumes, based on the 0.9 percentage point plunge in the unemployment rate since November. Such a large decline in the unemployment rate over a short period of time is historically unprecedented, and to my mind, the patterns in the data are hard to interpret. In particular, I don't see much auxiliary evidence to corroborate such a large improvement. For example, even though employment has expanded in both the household and payroll surveys, overall job gains since employment stopped falling have been modest, and the gains since November are far too small to account for such a large drop in unemployment. Furthermore, there is no evidence of a rebound in labor force participation—something I would expect to see during a recovery. Hours have also been flat, and this leaves me wondering whether a portion of the recent decline in unemployment may reflect a shift of discouraged workers from the

unemployment pool to those counted as out of the labor force. For example, about 3.8 million workers lost their jobs between November 2008 and March 2009, and those who are still unemployed would have exhausted extended unemployment benefits in recent months. I recognize that such an interpretation of the data may be completely wrong, but I do see a significant mystery here, and I hope we can unravel it in the coming months.

Turning to inflation, it is clear that headline inflation will be elevated in the months ahead due to surging energy and commodity prices. Friday's Michigan survey shows that rising gas prices have not only lowered consumer sentiment, but already boosted inflationary expectations. The survey reveals a sizable increase in inflation expectations one year ahead and a smaller increase in inflation expectations at the 5-to-10-year horizon. I view this development with concern, but I am not alarmed because, as David and others have noted, the pattern we are seeing is quite typical. Consumers commonly react strongly to contemporaneous movements in inflation, particularly to gas price increases. In other words, they overreact to recent inflation data. This suggests that when headline inflation comes down, as I expect it will if commodity prices either stabilize or reverse course, consumer inflation expectations should fall in tandem. We have seen this pattern repeatedly in the past. With respect to pass-through from higher commodity prices, the evidence points strongly to only very limited pass-through to core inflation and inflation expectations since the mid-1980s.

I want to thank President Evans for carefully laying out the evidence in his memo to the Committee, and I would like to say that I completely agree with the conclusions he draws. Thanks to well-anchored inflation expectations and limited pass-through, our Committee has had a good deal of flexibility in responding to such shocks as oil prices escalated between 2004 and 2008, and my expectation is that monetary policy will probably not need to respond this time

around either. That said, it would be dangerous for us to take the stability of long-term inflation expectations for granted. So we must be vigilant in monitoring data bearing on pass-through of commodity price increases to core inflation, second-round effects on wages, and movements in inflationary expectations in the days ahead.

CHAIRMAN BERNANKE. Thank you. Governor Duke.

MS. DUKE. Thank you, Mr. Chairman. My conversations with bankers were pretty brief this time. Most reported seeing very little change in credit since the last time we spoke, with continued gradual improvement in credit quality and weak loan demand as universal themes.

The question I normally ask the CEOs that I speak with is: What are the most important things that you are worried about, that are on your mind? Well, due to the timing of the calls, it didn't seem appropriate at this point to discuss interchange fees, because the comment period had closed—or capital plans, because the results have not yet been communicated—or mortgage servicing, given the ongoing settlement talks with various government entities. After carving out these three items, there was very little left to report. [Laughter]

As I read through the Tealbook and the staff forecast, I kept noticing the assumption for easing of credit conditions. And while I do see evidence of easing, I think the improvement is quite uneven across product types and markets. Unsurprisingly, the products where conditions are closest to pre-crisis norms, competition for new loans is most vigorous, and volumes are returning, are also the products where the delinquency and charge-off rates never got very far out of line. Nonrevolving consumer loans, primarily auto and student loans, are the best example of this, and Governor Yellen and President Fisher have both already mentioned auto lending. Auto dealers are attributing stronger sales to the broad availability of credit, and bankers attribute

growth in auto loans to stronger demand. Bank and nonbank lenders report terms and conditions in auto lending are at historical norms, and the pricing, volume, and composition of auto ABS would similarly indicate a return to normal. So I think it is entirely possible that the auto market could be a barometer of demand unconstrained by tight credit conditions. Student loans are also growing at a strong pace, but they show up as a negative on bank balance sheets as the government has now taken over the guaranteed student loan program. Several factors are probably interacting to produce the growth. The legislation authorized higher maximum loan sizes. Lower home prices have resulted in less home equity availability—a historical source of loans for education. Tuition costs are rising as states and foundations have less capacity, and reduced job availability could be leading more people to seek additional education. I don't worry very much about a credit-funded bubble in autos, but there are growing reports of students ending up with debt that is much larger than the earning power of their degrees, and the inability to relieve the debt load as these loans cannot be discharged in bankruptcy.

The other bright spot in lending is business credit. Delinquency and loss rates on C&I lending spiked during the recession but only to levels typical for recessionary periods, and they are now declining in typical cyclical fashion. C&I lending is the only category of bank lending that is still showing growth. However, loans made by large banks to large firms appear to be the primary reason for this growth. Small loans to businesses have been falling for all three quarters since banks began reporting the data on a quarterly basis. And while C&I loans at banks under \$10 billion are down for the year, they did grow slightly from the third to the fourth quarter, possibly a sign of a little momentum. Interest rate spreads on C&I loans are coming down for larger loans, but not for smaller commitments. However, every bank now reports more competition for C&I loans. Demand still seems to be driven by loans for acquisitions or one-

time transactions, and credit line usage remains at historical lows. Unused lines of credit are up, likely due to new line approvals that are not yet drawn. And the NFIB survey still shows declining levels of small businesses that sought new credit, indicating weak demand, and fewer respondents saying credit is more difficult to obtain, indicating improved availability. All in all, the business credit market appears to me to be ready to fund demand by businesses whenever it materializes. New issuance of CMBS continues to grow from low levels with some notable but not yet alarming relaxation of terms from the very tight standards of the early new issuances. And while overall commercial real estate loans in banks are still declining, the decline is driven primarily by steep drops in construction and land development portfolios. Rents and vacancies seem to be improving, with particular improvements in multifamily and hotel cash flows. Indeed, if there is an area where I would look for overheating, it would be in multifamily.

Credit card delinquencies are approaching normal levels, and charge-off rates are dropping sharply, but issuers report that their portfolios are increasingly skewed toward transactors who pay off monthly balances rather than those who fuel their spending through higher credit card debt. And credit card balances continue to decline, as do available credit lines.

Everything related to residential real estate, whether it's construction lending, mortgage lending, or home equity, is mired deep in the mud.

Completely unrelated to credit, I was a lot more confident that the recovery was on firm footing before this spike in gas prices. I am much more worried that higher gas prices will cause skittish consumers to pull back again than I am about the effect on inflation, and I am concerned that businesses that are unable to pass through price increases will offset risk to their profit margins with renewed reluctance to hire. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. As the minutes have passed, I have been trying to mentally cut back my statement. So I'm going to extemporize a bit.

The first point, on which I agree, I think, with virtually everybody, is that since our last meeting, the gradual recovery in the U.S. economy looks better grounded than ever. But as many of you have commented, the external risks—and I would say largely non-economically originating risks—are substantially larger than I think any of us anticipated.

I won't dwell on an assessment of the economy right now. I do want to identify two questions, which I think will have some salience for us going forward. One is probably a secondary question but was raised by Dave Stockton in his presentation, which is whether the less-than-expected levels of personal consumption expenditures observed over the last couple of months are more due to a growing set of concerns about these external problems, such as oil price increases or otherwise, or whether they have more to do with a chronic sense of concern about job prospects or other things more internal to the U.S. economy.

The second question, I think, is actually substantially more consequential, and this is the one raised variously by Charlie, Narayana, and Janet, which is to say: What is going on in the labor market? And exactly what conclusions can we, or should we, be trying to draw from the decline in the unemployment rate, notwithstanding the quite modest pace of net job creation along with the observed decline in the labor force participation rate? I think this one will have a lot of consequence for us as we have to make decisions over the course of the next year, and, like Janet, I am a little skeptical of at least some people's reactions—nobody on the Committee, but some people's reactions—which is to say, well, let's just assume that the trend for longer-term labor participation needs to be adjusted downward yet again. I just don't think we know enough. Maybe looking at the U-5s is one way to get at the information; maybe there are other methods

as well. But something is going on here that is not jumping out coherently from the different data streams.

The last comment I want to make is to try to draw together thematically a lot of the very trenchant observations that Bill Dudley made about various international developments. I think what is unusual about the adverse and worrisome developments for our economy right now is that they are dominantly noneconomic in origin. They are grounded basically in political or, more recently, natural factors, and they are also dominantly, though not exclusively, foreign. Obviously first is the possibility of oil supply disruptions, which could be somewhere between problematic and paralyzing, depending on how they go forward. But, look, we are just not particularly well equipped to make an assessment of how likely supply disruptions in Bahrain or any other Middle Eastern/North African country actually are. I'm not sure how confident the guys down C Street are in their ability to make those predictions either, but we surely can't.

Second are the persistent sovereign and bank debt problems in the euro periphery. I am a little bit more like Bill. I read it a little less optimistically than the staff has, I think. The way I looked at last Friday's agreement is that Europe is still doing just enough to keep a step ahead of the problems rather than clearly outpacing them. This pattern, I think, keeps open the possibility that some catalyst will accelerate the crisis quickly enough that the rather slow-moving European policy apparatus cannot keep up. I do think that our financial institutions in the United States have reduced their direct exposure to potential crisis countries substantially, although the transmission of problems from the periphery to core European country banks could still have an effect upon U.S. financial institutions and our own economy. I continue to restate Nathan's mantra that Europe has both the financial and technical resources to contain this set of threats,

but the condition that one needs to add is: if the political will to do so is present.

Understandably, the domestic and intra-European politics of all of this are very difficult.

Then there is Japan. I really don't think that we know nearly enough at this moment to speak with any confidence about what the medium-term impact of the tsunami and the consequent problems with the nuclear industry are going to be on Japan's economy, much less the growth or inflationary effects on the rest of the world. Ordinarily, we might think that, notwithstanding the human tragedy, the reconstruction efforts of a rich country would provide a medium-term fiscal boost, particularly since the devastation largely spared Japan's industrial base. But the scope of damage to the power infrastructure in particular, coming in the context of more than a decade of economic stagnation and unfavorable demographic changes, raises at least the possibility of substantially less transient and more negative effects. So my point in rehearsing all of these possibilities is that they are very hard to work into an economic model, formal or intuitive. We are more in the realm of uncertainty than of calculable risk, at least risks calculable through economic analysis.

Indeed, even the list of lesser but domestically grown potential downside effects on medium-term economic growth contains items like the legal uncertainties around liability for the foreclosure imbroglio and the prospect of accelerated fiscal contraction driven by larger political debates. In these circumstances, it would obviously be imprudent to downplay these possibilities. And while we may need to react should one or more of these risks be realized, it is certainly not clear to me that even the most serious of these largely external risks has any immediate implications for monetary policy. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Raskin.

MS. RASKIN. Thank you, Mr. Chairman. The economic recovery is proceeding at a moderate pace, but as I've noted before, reductions in employment, income, and wealth have hurt households since the onset of the financial crisis. I don't want to restate many of the excellent points that have been raised around the table, so I'll use my time to underscore but one aspect of my outlook.

In short, the views of your so-called business contacts are supported by the views of my so-called household contacts. [Laughter] Admittedly, with two teenagers at home and one home from college, all of whom consume large amounts of milk, cereal, facial cleansers, and gasoline, the age of my sample size is skewed to the downside. That said, consumers who are full adults and run households face more downside risk from higher prices at the pump as well as a groundswell of fiscal austerity facing the nation at all levels of government. As we know, consumer sentiment tumbled in early March, reversing just about all of the improvements since last October. Optimism on the employment outlook among consumers also retreated. The Reuters/Michigan Consumer Sentiment Index primarily attributes the overall swoon in sentiment to surging gas prices. This swoon would tend to be consistent with the fact that the drop in confidence is considerably steeper among lower-income for whom gas prices are hitting especially hard than for higher-income households. This sharp reversal of what had been an upward drift in consumer sentiment between October and February is disconcerting. It doesn't bode well for economic growth. The rising cost of food and fuel, especially if these factors continue to rise, together with the effect of suboptimal job creation, could hinder or even derail growth in consumer demand.

I'd also like to remind the Committee that the housing market is also hindering growth in consumer demand. Household equity is far from being restored. From 2005 to the end of 2010,

\$6.8 trillion in home equity has been lost. With our staff's assumptions of there being a \$0.03 loss in consumption for every \$1.00 loss in home net worth, this \$6.8 trillion in lost home equity represents a loss of more than \$200 billion in consumption. And given the delays between drops in household equity and changes in consumption, the losses to consumption have not all been realized.

House prices continue to decrease, and despite household efforts to pay down their mortgages, home equity continues to fall. Indeed, cash refis are flat at zero. So not only is the so-called wealth effect of housing on consumption flat, but the ability of homeowners to tap quickly into any equity to fund household needs and other consumption is all but gone. The housing market still shows no signs of emerging from the significant overhang of residential real estate that is in foreclosure or entering the foreclosure process.

The baseline forecast of continued recovery depends importantly on steady improvements in, among other things, consumer confidence and the willingness of firms to hire, but these improvements may be materializing slowly. If so, risk aversion among households will increase, boosting precautionary savings by households and making firms more reluctant to boost capital spending and increase payrolls. The recent payroll tax cut, which was effective in January of this year, appears so far to be unnoticed by consumers, and if it remains as such will not have an appreciable effect on consumer spending.

I haven't addressed the economic impact of the earthquake and tsunami tragedies in Japan on household net worth, but I believe they loom large and will exert downward pressure on household consumption. The consequences on consumption and economic growth are not yet fully known, but, if realized, will slow the path toward recovery. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you, Governor Raskin, and thank you all. As usual, I'm going to attempt a summary of the discussion. Bear with me, and then I'll make a few additional comments.

Indicators continue to point to a strengthening though moderate recovery in 2011. Private-sector demand may be leading to self-sustaining growth. Labor market conditions have improved as unemployment fell significantly, though payroll growth has been somewhat less strong overall. Housing remains a drag on the recovery, as do fiscal policy, both at the federal and state and local levels. In addition, the effects of the Japanese situation remain unclear. With respect to inflation, the most important developments were, again, higher prices for oil and other commodities, which have increased headline inflation and contributed to some increase in indicators of inflation expectations. On net, risks to economic growth appear relatively balanced, while risks to inflation have shifted somewhat to the upside.

Consumer behavior reflects mixed influences, though auto sales remain strong. On the one hand, tax cuts are showing up in paychecks, and as noted, labor market conditions are improving. Unemployment is down, although in part this improvement reflects fewer layoffs and exits from the labor force rather than new hiring. The decline in the labor force may be either cyclical, reflecting the expiration of unemployment insurance, or structural. On the other hand, higher gas prices have drained spending power, reducing confidence and expectations for recovery while increasing expectations of inflation. Special concerns might arise with \$4 per gallon gas, along the lines of the Hamilton theory of oil price effects. Home equity declines have reduced household wealth. Credit availability for most households—for example, in areas such as auto loans—has improved, however.

In the business sector, cautious confidence in the durability and momentum of the recovery is growing. Capital budgets have expanded in some cases to replace lost capacity, although at least some firms remain cautious about hiring. (I had a hard time trying to characterize firms' attitudes toward employment.) Wage pressures are low except possibly in a few narrow fields. That pattern is evident in recent union developments. Strong demand abroad is also stimulating production and exports, including agricultural exports. Higher commodity prices are leading to intensified cost pressures, some of which firms will attempt to pass through to consumers. Higher energy prices are also seen as a threat to demand by some firms. Among key sectors, manufacturing, energy, capital goods, air travel, and agriculture were reported as strong. Processed food, apparel, and steel are among the industries looking to raise prices. Construction and construction lending remain generally depressed.

Financial conditions were mixed over the intermeeting period. It remains to be seen whether recent European proposals will calm the sovereign debt crisis there. The dollar showed less flight-to-quality behavior during the recent MENA disruptions. U.S. banks see improving credit quality and weak loan demand (and we're not allowed to talk about anything else). [Laughter] However, credit conditions have improved in some areas, including autos, student loans, and C&I, although small businesses are doing relatively worse in that respect. Some risks to financial stability have been noted, including greater leverage and risk-taking by private equity funds, increased speculation in commodities, reduced covenants on bonds and leveraged loans, banks' exposures to Europe, and high farmland values.

Finally, on inflation, core inflation and other measures of inflation trends appear to have bottomed out but remain low. Some noted that ongoing slack in labor markets, limited pass-through of commodity prices, and stable inflation expectations should keep inflation trends low,

but others saw core inflation rising as economic growth proceeds. Near-term headline inflation is showing the effects of significant increases in gas prices and, to a lesser extent, in food prices. As noted, increased commodity prices have raised costs for many producers, which they will try to pass on to final users where conditions permit. Import prices are also up. Business surveys show higher prices paid and received. That said, wage costs are low and mark-ups are high, providing an offset for raw material costs. Higher near-term inflation has shown up in some increase in inflation expectations—for example, in consumer surveys—and public attention to inflation has increased. Inflation breakevens in the TIPS market have increased to levels in the upper part of recent ranges, though much of the effect is front loaded. The enlarged Fed balance sheet may have influenced inflation expectations. The increase in headline inflation may well be temporary. However, close monitoring of inflation and inflation expectations is essential, and communication will present difficult challenges.

Any comments? [No response] Well, let me just add a few thoughts, and some of them will build on comments that some of the folks around the table have made.

There were some negative developments over the intermeeting period. Obviously, we've talked a lot about geopolitical disruptions, which have led to oil price spikes, and the Japanese situation, the implications of which are not yet known. We saw some fiscal tightening, although depending on how that plays through, if we get a longer-term budget deal, it could end up being a positive. Ongoing concerns with housing and the banking system should be noted, particularly recent developments on the foreclosure problems and the servicing issues. Finally, some of the downward revisions we saw in Q4 and in consumption in Q1 suggest a bit less vigorous expansion in some dimensions than we thought in January.

That said, on the whole, like most of you, I am cautiously confident. The labor market report for February was encouraging; we're beginning to see, I think, what may be a sequence of stronger payroll gains. The drop in unemployment has been noted, as well as the fact that the Beveridge curve has shifted somewhat back toward where it began. The strength in the labor market is supported by surveys, like ISM surveys, for example. There have been other strong indicators, such as equipment and software investment, factory output, auto sales, and the like. So overall, the recovery does appear to be continuing—perhaps not as powerfully as we would like, but the longer it goes on, and the fewer times the Tealbook has to be revised between meetings, the more encouraging that is. So I do agree with people around the table that we are beginning to see more evidence that the recovery is self-sustaining.

There was a lot of discussion about inflation around the table, which, of course, is up in the near term. I'd like to address that from a number of dimensions. First, I think it is worth noting—just a bit of perspective—that the commodity price increases we've seen so far are not going to take headline inflation very high. According to the Tealbook analysis, the maximal 12-month PCE headline inflation will be 2.3 percent in June, and it will move down from there to 1.8 percent in December. That's, of course, under the usual assumptions about flat commodity prices and the like. But I would note that in 2008, this Committee was facing an inflation rate that was 3.6 percent in January and hit 4.5 percent in July before falling to 4 percent in September. So we have dealt with these commodity price increases before, and we have not necessarily seen any catastrophic movement in inflation expectations. That being said, as I will make clear, I don't take any of this lightly.

I do think as we talk about inflation—and a lot of the focus has been on whether commodity prices are being passed on or not—we need to keep in mind the basic economics of

how monetary policy should respond to commodity price increases. The theory is very well established, but it is worth saying once again. There are essentially two cases. The first case is one in which it's a supply shock, that is, the increase in commodity prices is being driven by some set of factors outside of monetary policy or in which it's otherwise exogenous to the domestic economy. In that case, what the economy is trying to do is propagate a relative price shift, trying to say that the relative price of this commodity versus other goods and services has changed, and somehow the system has to accommodate that. Now, if we believe that nominal wages, in particular, are slow to adjust for whatever reason, then the only way that the commodity price relative change can emerge in the system is through a temporary increase in headline inflation. The alternative case, which would be to tighten monetary policy enough to avoid the increase in headline inflation, would require that we force down wages, which, in turn, would require presumably a significant negative impact on the economy. So in these cases, for whatever reason, we think the commodity price increases are largely independent of monetary policy—and I'll come back to whether that's the case currently or not—there is a very clear implication that so long, obviously importantly, as inflation expectations remain stable—and that's something many of you addressed—then we should be relatively willing to look through temporary movements in commodity prices rather than reacting strongly with monetary policy.

Now, I note that Vice Chairman Dudley laughed at himself on the communication issue that he has. There is a communication issue: Because monetary policy should not address these things doesn't mean they're not painful. It doesn't mean they're not affecting people's lives. And we clearly, in talking about it, should in no way downplay the effect of high gas prices and high food prices on people's standards of living. So we must do that, but that doesn't necessarily mean that in all cases monetary policy has to respond vigorously to commodity price increases.

So what is the situation? How much of an argument can we make for the exogeneity or partial exogeneity of the commodity price increases that we've seen recently? I think the case is moderately good, although obviously not complete. Clearly, in the oil area, geopolitical factors have been very important; they've driven up oil prices quite significantly. On food, there has been a rather severe concatenation of bad weather conditions. The USDA has confirmed that, for a wide variety of staple crops, weather conditions in the past year have been exceptionally bad. This, in fact, shows up, as Nathan mentioned, in the futures market. For example, the cotton futures for a year from now are about half of what they are in the spot market, suggesting that there is a strong presumption that normalization of crops in the year to come will bring prices down or at least stabilize them. So I think there is some case for paying attention to the futures market in this case. And, of course, there's an interaction between energy prices and food prices. Higher energy prices tend to raise food prices as well.

Now, of course, there's also a global demand element to the increase in commodity prices, and there the linkage to U.S. monetary policy is more complex. When I'm trying to make a simple argument, I talk about the relationship between U.S. monetary policy and, say, oil prices. I point out, first, that the United States is consuming less oil and producing more today than it did five years ago or three years ago, and so overheating of the U.S. economy is not directly influencing net supplies of oil demand in the global economy. It's also the case that the decline in the dollar is not remotely enough to explain the movement in commodity prices. In particular, commodity prices are much higher in all currencies, not just in the dollar. So if there's a relationship between U.S. monetary policy and global commodity prices, it's more indirect. The story that I think is most plausible is one where you have a world in which some emerging market economies are intentionally keeping down their exchange rates in order to

expand their export markets. They are, therefore, importing, to some extent, U.S. monetary policy, which is inappropriate for their economies.

We have a situation in the world today where industrial production in the advanced industrial economies is still below the level at the beginning of the crisis, while in the emerging markets it is between 20 and 25 percent above the level before the crisis. So we have very much a two-speed recovery, and in a well-functioning international monetary system, those countries that are growing quickly and, in fact, are overheating would allow their exchange rates to appreciate and would tighten, raise interest rates, and reduce the inflationary effect of their growth. They are doing that to some extent, but obviously not completely, so the question remains: What is our responsibility? I think it's a hard question. On the one hand, our mandate is to address the U.S. economy, and so in some sense we have to worry about the feedback. On the other hand, it seems rather unfair that the emerging markets can essentially force us to maintain a suboptimal economy so that they can keep their exchange rates at a comfortable level and maintain undervaluation and trade surpluses. So it's a difficult question. But clearly, I think everyone would agree that this effect is being mediated not just from U.S. monetary policy decisions, but also through the decisions being made by policymakers in emerging markets, and in that respect, it's a difficult question.

The main counterargument to the view that we should not be responding too aggressively to commodity price increases is, of course, the one that people around the table have made, which is that even exogenous price increases in commodities could, in principle, unhinge inflation expectations for whatever reason. And in that respect I am in full agreement with everyone around the table that we need to watch that very carefully. My feeling is that so far that that has not happened. The movement in all of our various indicators remains still well within

historical ranges, particularly in the TIPS market. Almost all of the changes, as Brian Sacks showed, have been in the near-term expectations. The longer-term inflation compensation is not much changed, even though one would presume that inflation risk premiums are a little bit higher than they were. Forecasts from the SPF and elsewhere are, in fact, below where they've been in recent years. There's as of yet not much evidence of pass-through, et cetera. So I don't think that that mechanism is as yet a reason for alarm. That being said, that is the mechanism by which even exogenous commodity price increases can be translated into inflation domestically, and that is something to which we have to pay very close attention going forward.

Let me say a word about the comparison of U.S. monetary policy with other countries. There were a number of people who mentioned the ECB, for example, and there's a meme in the international press, you know, that the ECB is so hawkish and the Fed is so dovish, and that's a difference in our constitutions or something. In fact, if you condition on economic conditions, it's not at all evident that the ECB is more hawkish than the Federal Reserve. Just to give you a little exercise that I did, and I recognize it's an imperfect exercise, if you take the Taylor (1993) rule, which puts a relatively low weight on output gaps, then you can compare the conditional tightness of any two countries by just taking the difference between the Taylor-rule implications for the two countries. In particular, if you ask what is the difference in the policy rate that is warranted by the Taylor rule in a given country, the answer is it should be 1.5 times the difference between the inflation rate in that country and the U.S. inflation rate minus half of the gap in that country minus the U.S. gap. That essentially tells you what the difference in policy rates should be. When you do this exercise, you find, for example, that while the actual euro-area rate is 60 basis points higher than the U.S. federal funds rate, the difference implied by the Taylor rule is 215 basis points. The reason is that the output gap there is much lower and the

inflation rate is higher. For the United Kingdom, they're 40 basis points tighter than we are; the implied difference from the Taylor rule is 405 basis points. For Canada, it is 310 basis points. The only country that is easier than the United States is Japan, which of course is also constrained by the zero lower bound. So in that respect, I think if you condition on economic conditions, the difference is much less evident than some of the superficial discussion would suggest.

In particular, though, I realize that the output gaps are a question. Although the ECB's output gap for its own area is apparently lower than our estimate, putting that aside, there really is a major difference in what's happened to unemployment here and in other countries. For example, our unemployment rate is 4.3 percentage points above the two-year average before the crisis, whereas the EU's increase in unemployment is 2.0 percentage points. So there's been a much bigger increase in unemployment here than in other countries. The same is true in the other countries for which I compared, and in particular, imagine being at the ECB in Frankfurt and taking into account the fact that the German unemployment rate is now 2.6 percentage points below what it was before the crisis. So it's not all that shocking that the ECB is talking about tightening, and it's not evident from that that the Federal Reserve is behind the curve. So I thought that was worth mentioning.

I think we're still constrained by the zero lower bound, notwithstanding the considerations I discussed today. I think further that—and again, anticipating the policy discussion—given all that has happened in the world, now is not the time to be shocking markets with our policy decision. That being said, once again, I've heard what you've said around the table about inflation risk; I've heard what Presidents Fisher and Hoenig said about financial instability risks. I do think we need to become more and more attentive, and I think that by the

April meeting, we should be providing fairly definitive guidance to the markets about what we're going to do with our purchase program and possibly with additional measures. But, again, I don't think that today is necessarily the day to do that.

Let me stop there and turn now to Bill English to introduce the policy round.

MR. ENGLISH.<sup>2</sup> Thank you, Mr. Chairman. I will be referring to the package labeled "Material for FOMC Briefing on Monetary Policy Alternatives." The package includes the three revised draft statements that we distributed yesterday, along with associated draft directives.

Turning first to alternative B on page 3, Committee members may think that the medium-term outlook for real activity and inflation remains broadly in line with their expectations at the time of the January meeting, and, accordingly, that no change in the course for monetary policy is called for. Even after the declines in the unemployment rate over the past few months, policymakers may see unemployment as too high and likely to remain so for some time, and they may anticipate that higher energy and other commodity prices will boost headline inflation only temporarily, as long as longer-term inflation expectations remain anchored. Indeed, because higher commodity prices can also be expected to reduce real income and damp consumer spending, policymakers may think it appropriate to leave policy unchanged in the face of such a shock. With measures of underlying inflation still low, you may be inclined to continue with the current purchase program at this meeting and wait for additional information on output, inflation, and inflation expectations before deciding on your next step. Moreover, Committee members may be concerned that unexpectedly discontinuing or reducing the purchase program could cause confusion about the Committee's intentions and thereby weigh on household and business confidence, particularly given the elevated uncertainty caused by the recent events in the Middle East, North Africa, and Japan.

As for the statement language, the first paragraph would be updated to suggest somewhat greater confidence in the recovery and to acknowledge the run-up in commodity and oil prices. Paragraph 2 would no longer suggest that progress toward the Committee's objectives has been "disappointingly slow." Instead, it would note the temporary boost to headline inflation from energy and other commodity prices, and say that the Committee expects limited pass-through to underlying inflation. The language added yesterday emphasizes that you will "pay close attention to the evolution of overall inflation and inflation expectations." Finally, in paragraph 3, the bracketed words could reintroduce the pace of asset purchases as an addition to their cumulative total. However, doing so would likely lead market participants to believe that the Committee was signaling the likelihood of some change in its plans—perhaps an intention to adjust that monthly total before long—that you might not intend.

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

A statement along the lines of alternative B is generally in line with market expectations and would probably have little effect on asset prices.

Alternative C, page 4, might be appropriate if the Committee saw the rapid decline in the unemployment rate over the past three months, the rise in headline inflation, and the uptick in some measures of inflation expectations as suggesting that the upside risks to real activity and inflation had increased significantly. The intended size of the asset purchase program would be cut to \$450 billion and the statement language adjusted to signal an early move toward exit. Almost two years into the economic recovery, you may be worried that the higher prices for oil and other commodities could, in a context of very accommodative monetary policy and large federal deficits, lead to an increase in longer-term inflation expectations that would be very costly to address later on. If so, you might judge that a reduction in accommodation at this meeting could lead to improved medium-term macroeconomic outcomes. Some of you may also find a reduction in policy accommodation attractive because of concerns about signs of potential asset price misalignments or increased leverage in some parts of the financial system that could contribute to financial instability down the road.

The statement under alternative C would provide a somewhat more upbeat assessment of current conditions and the outlook than under alternative B, noting that the recovery “is strengthening” and that conditions in the labor market “are improving.” The inflation discussion in paragraphs 1 and 2 is the same as in alternative B. Paragraph 3 scales back the size of the asset purchase program, and the statement would also indicate that reinvestments of principal would continue only “for the time being” and that the Committee anticipates “low levels” of the federal funds rate for “some time,” rather than “exceptionally low” levels for an “extended period.”

Alternative C would surprise market participants and would likely lead to an increase in longer-term interest rates, lower stock prices, and a rise in the foreign exchange value of the dollar.

Alternative A, page 2, would also be a surprise to the markets, but in the opposite direction. Alternative A might be seen as appropriate if policymakers have read incoming data as suggesting that the recovery has not been as strong as was anticipated at the January meeting or if they see greater downside risks to the outlook for economic growth arising, for example, from the possible effects of higher energy and other commodity prices on household spending or from uncertainty about the likely outcome of the recent events in the Middle East, North Africa, and Japan. In this environment, members may think that a move toward easier policy is significantly more likely than one toward tighter policy over coming months, and that emphasizing that the door is open to additional policy accommodation could reassure households and businesses and so support the recovery, even if no policy change were ultimately required.

The language of alternative A would suggest that the Committee had not upgraded its view of the economy, noting only that the recovery is continuing and that employment remains at low levels. Paragraph 2 would end by noting that “downside risks to the economic outlook remain significant.” Paragraph 3 would confirm that the Committee “will” purchase the full \$600 billion of longer-term Treasury securities, and that it is “prepared to expand and extend the purchase program” if needed to achieve its objectives. The fourth paragraph would provide more-explicit forward guidance about the expected path for the federal funds rate by specifying that exceptionally low levels were likely “at least through mid-2012.”

Finally, I wanted to briefly return to the issue of tapering the Federal Reserve’s purchases of Treasury securities that Brian raised earlier. Tapering would involve gradually reducing the pace of purchases over coming months and, if the Committee still intended to reach \$600 billion of purchases, extending them into the third quarter. As Brian noted in his Desk report, the depth and liquidity of the Treasury market suggests that significant tapering is unlikely to be necessary to avoid an adverse market reaction, and that most market participants do not appear to be expecting tapering. Nonetheless, you may find some amount of tapering attractive as a form of insurance against an adverse market reaction to the end of purchases.

There are several other issues that the Committee might want to consider regarding the possible desirability of tapering. If it were to taper, the Committee would have more time before the end of the program to make adjustments—either up or down—to the overall volume of purchases if that became appropriate. However, some policymakers may be worried that tapering could increase public uncertainty about the Committee’s intentions regarding the size of the program and so could prove counterproductive. The Committee also might be concerned that an extension of the period over which purchases are completed could, if macroeconomic conditions changed sufficiently rapidly, lead to an undesirable delay in the Committee’s move toward exit.

Draft directives for the three alternatives are presented on pages 6 through 8 of your handout. Thank you, Mr. Chairman. That completes my prepared remarks.

CHAIRMAN BERNANKE. Thank you, Bill. Any questions for Bill? [No response]

Seeing none, we can turn to the policy go-round, and we’ll start with President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. I support alternative B. I also believe we should complete the full \$600 billion in the government securities purchase program. On balance, the oil shock and fiscal austerity have not significantly altered my view on medium-term inflation pressures but have made me somewhat more concerned about the strength of the recovery.

I would note that President Hoenig's comments as well as the financial stability memo have highlighted that agricultural land prices are rising quite rapidly in many farm states. I do not believe that this is a reason to raise rates or to alter monetary policy. However, I do believe it warrants careful supervisory scrutiny. Higher farmland prices are a reaction to improvements in developing economies and their ability to spend more on importing food, as well as to a series of disruptions that have hurt food production in other areas of the world. Tightening monetary policy will do little to effect farmland prices, but it will almost surely make a slow recovery even slower. While monetary policy is probably not appropriate for targeting agricultural and other commodity prices that I do not expect to have broad effect on overall prices, as I discussed earlier, supervisory policy could be quite effective in the case of surging agricultural land prices. Requiring higher underwriting standards for land purchases and requiring banks to conduct stress tests to assess the adequacy of their capital in the event of a rapid reversal of farmland prices does seem appropriate.

In terms of the tapering that we had just discussed, I think it's going to be very difficult to actually have that communication strategy at this point, so my preference would be not to taper.

CHAIRMAN BERNANKE. We are, in fact, as I understand it, talking to banks about the farmland situation, and Kansas City is playing an important role in that. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. As I said earlier, I see parallels between our situation today and the unexpectedly rapid increase in core inflation in 2003 and 2004. In late 2003, the recovery was disappointingly slow. We were expecting persistent slack to hold down inflation, perhaps to lead to outright deflation. Energy prices were surging. Flat futures curves led us to believe energy prices would level out. Our estimates of economic slack led us to believe that core would remain low. Instead, as economic growth picked up, core inflation rose

rapidly, from under 1.5 percent to 2¼ percent. That pickup in inflation turned out to be persistent. Core inflation remained around 2¼ percent and bounced right around there for the next four years, and that set the stage for our inflation outcome over that four years, which turned out to be not that great—3 percent overall headline inflation.

As I said earlier, in assessing this risk, I think it's useful to consider the perspective of a typical business person trying to figure out their pricing strategy. On the one hand, core inflation has been running relatively low in the last couple of years. And if they've been paying attention, they've probably heard of Fed officials emphasizing their commitment to price stability. On the other hand, their firms' experience coming out of the last recession, although many years ago, may be present in their mind and may suggest that now's the right time to expect an increase in inflation. They are no doubt aware that the Fed has been purchasing securities and flooding the banking system with liquidity. They may have come across some fringe commentators or bloggers or maybe even some political figures ranting about hyperinflation right around the corner. In the reporting on QE2, they may have picked up that the Fed wants the inflation rate to be higher than it is now, and they may have not been exposed to the excellent statements you've made, Mr. Chairman, making very clear that we do not intend to overshoot an inflation rate of 2 percent. So there may be a substantial number of business people who have absorbed ideas suggesting there's a substantial risk of higher inflation ahead. Some of the ideas they've absorbed may be not well founded, but they might affect inflation nonetheless. I recognize that the risk that core inflation ratchets up is always with us, but what I've tried to do is make the case that at this time in the business cycle, that risk is more present for us, more pressing, and ought to be considered substantially more urgent now than is typically the case. I think this risk poses very difficult challenges for us. We should, of course, do anything we can through

statements and communications to enhance our credibility and get the message out about our expectations regarding inflation. But actions often speak louder than words. And I think we need to be prepared to take actions to keep core inflation under control in this episode.

For today, I feel an irresistible attraction to alternative C, but I can support the status quo with the economic updating in alternative B at this meeting. At our next meeting, if core inflation were to continue to rise, if we were to see another very strong employment report or other signs of stronger-than-expected growth, I would strongly support reconsidering ending the asset purchase program earlier. Beyond that point, my best sense is that we're going to need to take action sometime this year, either initiating asset sales or raising the funds rate by the end of the year.

As for tapering, it strikes me as excessive fussiness about the timing of purchases, and the challenges to communication suggest we just follow through, if that's what we're going to do, on a pre-decided schedule. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Kocherlakota.

MR. KOCHERLAKOTA. Thank you, Mr. Chairman. I support alternative B, but I would like to propose changes to the third sentence of paragraph 2 of alternative B, and I'm suggesting these changes because I think the tension in the public's mind about what's going on with headline inflation and our accommodative stance makes it important for us to clarify. So with that backdrop, I would propose replacing the word "temporarily" with the word "currently," and I would propose dropping the word "headline" from that sentence. Then in the next sentence, instead of saying "limited pass-through to underlying inflation," I would say, "The Committee expects these effects to be transient," comma, "and" instead of "but," "it will pay close attention to the evolution of overall inflation and inflation expectations." The impact of

these changes would be to say that we are seeing upward pressure on inflation right now, but we are not reacting to them because we expect those changes to be only transient in nature.

As President Bullard articulated, I do think our ultimate variable of interest is headline, but it's over a sufficiently long period of time. The reason we're not reacting to these changes is not because they're showing up in headline, it's because of the fact that we expect them to be sufficiently short lived. So that's my proposed change to alternative B.

VICE CHAIRMAN DUDLEY. Would you read the proposed change?

MR. KOCHERLAKOTA. Do you want me to read the whole thing?

CHAIRMAN BERNANKE. Read the two sentences that you changed.

MR. KOCHERLAKOTA. "The recent increases in the prices of energy and other commodities are currently putting upward pressure on inflation," period. "The Committee expects these effects to be transient, and it will pay close attention to the evolution of overall inflation and inflation expectations."

CHAIRMAN BERNANKE. I think, actually, that's very good. Is there a feeling around the table?

PARTICIPANTS. Yes, I agree. Very good.

CHAIRMAN BERNANKE. All right.

MR. FISHER. May I ask one question, Mr. Chairman?

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. This is picky, but why use "and" instead of "but"? If you say "and," you're sort of dismissing it. If you say "but," you're saying we have to pay attention.

MR. KOCHERLAKOTA. Yes, but—sorry, "but" is fine.

MR. FISHER. I hate to butt in.

MR. KOCHERLAKOTA. You did that just for that reason, I'm sure. [Laughter]

CHAIRMAN BERNANKE. So the idea is: "...these effects to be transient, but it will pay"—. Yes.

MR. KOCHERLAKOTA. That's fine.

CHAIRMAN BERNANKE. All right. I think that's very constructive, thank you. Who's next here?

MR. KOCHERLAKOTA. I have a few more words to say.

CHAIRMAN BERNANKE. I'm sorry. You've contributed so much already.

MR. KOCHERLAKOTA. Well, thank you. I'm opposed to tapering our purchases; I agree with both President Rosengren and President Lacker on that. I like the preliminary discussion of exit in the Tealbook. I'm looking forward to a fuller discussion in April. Certainly, I don't think we'll be in a position at that point to settle this question of when exactly exit will begin, but I'd like us to begin to settle on the sequencing of timing and moves after a given start date.

In the last six weeks, the Tealbook has moved up its projection of our first interest rate increase to the third quarter of 2012, but I anticipate exit to be a multimeeting process that will most likely begin three to four meetings before the actual raising of rates. I would think it would begin with the changing of language, but that's something we can start to discuss next time. If my forecast is right, that would mean we will start the process in about a year. Of course, raising rates in the third quarter of 2012 is a point forecast, and the Tealbook also includes a 70 percent confidence interval for that point forecast. That error band includes an increase in the fed funds rate of 50 basis points by the end of 2011. So that's what's in that 70 percent error band.

In a similar vein, it's instructive to look at table C of the March 11 memo to Reserve Bank Research Directors from Thomas Tallarini. (I stole it from my Research Director. I don't think I'm supposed to be looking at those things.) That table uses simulations of FRB/US to estimate the probability that the fed funds rate will exceed 25 basis points at some point during the year 2011, and the table reports that estimated probability as being 52 percent.

So monetary policy is about risk management, and good risk management means being ready for the possibility that we may need to initiate exit by as early as September or November, and I hope we do that planning for that possibility. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. I favor alternative B. The editing suggestions seem fine with me.

The outlook is improved. Underlying inflation continues to be low, so I expect to support completing our \$600 billion of purchases until we're finished in June. I have a preference for no tapering of the program.

There is a clear risk for policy and our credibility if inflation expectations were to increase substantially. I think we all understand and agree on that. I did take a little additional comfort from Brian Sack's report that indicated that the one-year forward inflation breakevens have only increased a touch once you start looking two years and out, and so most of the shift has been in the near term. But we need to keep the inflation expectations risk front and center, so I wholeheartedly agree that we should monitor that.

Still, I think resource slack is important, and I welcome President Kocherlakota's insightful comments about slack estimates from the simplest New Keynesian models. I am a

little skeptical about the sturdiness of these conclusions, and I think he used the term “reliable measures.” I’d like to see more on that, I agree with that assessment.

Inflation dynamics from the simplest New Keynesian models don’t seem to match the data. It actually takes quite a lot of work in order to introduce mechanisms like that, and, in fact, some New Keynesian models that don’t have enough of the inflation dynamics embedded in them likely have mean reversion baked into their inflation forecast. If they don’t have enough inflation persistence, and then they see data that show a drop in inflation, they’re going to see that inflation goes back up, and 2 percent is probably what’s baked into that model. So I’m really not sure what confidence we should have coming out of those types of models unless the match of the model with the data is reasonable. I think that’s something that we have to understand. In the DSGE versions that we use in Chicago, we put a lot of emphasis on the channels that help induce more inertial inflation dynamics, and I would say, like Jeff Fuhrer’s research has emphasized on this, it’s a very important feature. I’d like to see similar slack assessments coming from models that match the data better, and in the memo that I circulated on commodity prices, I had a line in there that alluded to this. I think there’s risk in putting too much weight on theoretical constructs that don’t really describe the data nearly well enough. I’m not quite sure how much emphasis we should put on that.

In terms of policy going forward, the Tealbook has the assumption that the interest rate takeoff will occur in mid-2012. Yes, that could happen; I could see that that could be acceptable even with my outlook and concerns. I still expect that core PCE inflation at that time is going to be 1½ percent or less, so I’m a little nervous about that, but if the facts change, I will change my opinion on that.

Thinking about exit strategy, I can even imagine a reverse tapering of our \$600 billion asset purchase, along the lines that Presidents Kocherlakota and Bullard have previously mentioned, that might take place before the rate liftoff. I'd just like to understand the possibilities there a little bit more, so in the discussion that we have about exit strategy, perhaps a little more emphasis on that than what the consensus was over a year ago.

Putting it all together, given the outlook and the inflation risks that we face and the slack estimates that I think are appropriate, I am comfortable with alternative B, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Kocherlakota.

MR. KOCHERLAKOTA. Yes. I thank President Evans for his close attention to my remarks.

MR. EVANS. I learned from President Bullard last time.

MR. KOCHERLAKOTA. I will just articulate one thing, which is that I am only emphasizing one aspect of the New Keynesian model, which is the Phillips curve itself, and so when you want to evaluate what I'm saying, you want to do it like a GMM test, or something like that, of that one particular equation. So that's the only piece of the model that I'm exploiting.

MR. EVANS. We have research evidence on that from the Chicago Fed. Jonas Fisher and Marty Eichenbaum did work looking at exactly that type of GMM Euler equation, and it doesn't do very well unless you add more dynamics to that, but we could go back and look at that more carefully.

CHAIRMAN BERNANKE. With great reluctance, I think I'd point out it's getting a little bit latish. [Laughter] Let's try to minimize the research program component today. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. A second round of LSAPs is nearing its scheduled conclusion in June. As you know, I was not in favor of this policy when it was implemented last November, and I certainly cannot support another round of purchases. The current forecasts simply don't justify any serious consideration of a new round of purchases. The Tealbook suggests the possibility of extending the time frame for the purchases, the tapering plan. I don't support a tapering plan. I don't think that is necessary. The argument for LSAPs is they work through stock effects and not flow effects, so I'm not quite sure why the argument for tapering makes a lot of sense in that context. I don't think the end will be disruptive to markets. We've been telling them what we were going to do. Let's just go ahead and do it and not worry about it so much. I think the only justification for tapering would be to say that we decided to cut back on the stock effects and say we were going to go to \$40 billion per month, but that would be the only justification in my mind to change the pace at this point. Thus, I'm assuming the program will end in June, which means that our April statement will need to signal the LSAPs will end in June and that no further purchases are anticipated at that time. I don't think it's too soon for us to consider what changes we will need to make in that statement and plan for them now using appropriate language in today's statement.

Let me make three points about the language of the alternatives we're considering today. First, the recovery is gaining momentum. I think that was fairly apparent from the discussion around the table by people's descriptions of the economy. I think it's important that we convey this in our description of economic conditions in paragraph 1 so that the markets will understand that the LSAPs will end in June as anticipated. You'll recall that in January some of us felt that our statement read a little too negatively on the economy, given our forecasts, and indeed, the Committee did get some criticism along these lines once we released our January statement. I

think we should make sure that our statement language is well calibrated to our read on the current conditions and our forecast. To my mind, the tone of paragraph 1 in alternative B read better in the Tealbook than it did in this most recent version. But I think actually paragraph 1 in alternative C is even a better characterization of economic conditions. After all, this Committee, in terms of its forecast, is still forecasting well above trend growth for the next two years. I think the one thing that might help in paragraph 1, alternative B, is that I might suggest dropping the word “somewhat” from the first sentence and suggest “is on a firmer footing” rather than “somewhat firmer footing.” “Somewhat firmer” seems like there are too many adverbs and adjectives here to describe what’s going on. Just a thought.

Second, as the economy continues to strengthen, I think we will need to begin revising our policy course later this year, as I suggested earlier. This means our language in paragraph 4—that economic conditions are likely to warrant exceptionally low levels of the funds rate for an extended period—is beginning to ring untrue. We should consider the alternative C language that changes “extended period” to “some time” and “exceptionally low” to just “low” if not at this meeting, then perhaps at our April meeting. We have to remember that we can change the language and even raise rates considerably and a policy will remain very accommodative for some time to come.

Third, I strongly support Professor—“Professor”? He’s still a Professor—Kocherlakota’s recommendations on paragraph 2. I think we got a quick unanimous read on that; I support that. Paragraph 2 also is a statement about the economy’s performance relative to our mandate. Thus, I’m a little uneasy about phrasing this in terms of the unemployment rate. After all, our mandate is about price stability and maximum employment, not about the unemployment rate. They are, of course, related, but they are different. Moreover, we will need to begin exiting from

accommodation well before the unemployment rate is at a level that is acceptable to the average person. So the language of continuing to stress the unemployment rate as our indicator may complicate our communications as we plan on exit. I think we need to find an opportunity—if not today, then in April—to start using mandate-consistent language in this paragraph, talking about the level of employment or the level of unemployment rather than unemployment rates. Unemployment rates, as we know, lag the economy and lag both employment levels and unemployment levels.

Finally, as I discussed at our January meeting, I think it is extremely important that we begin planning for our exit from this period of extraordinarily accommodative policy, and I'm glad we'll be reopening this discussion in April.

In my view, our exit strategy should be thought of as a plan, and it should have the following desirable characteristics, which I would suggest: First, the plan should be a systematic one, entailing some degree of commitment to the way we will execute the strategy, since this will reduce uncertainty in the markets and in the public's mind. But it also should allow for some conditionality on the evolution of economic conditions as, in fact, all good monetary policy should do. Second, the plan should be easy to explain to the public and to market participants, and we should make every effort that when we decide on the plan, that we, in fact, communicate it to the public. Third, the plan should be able to return us to a "normal" operating environment in a timely way, and I think we need to communicate to the markets what that normal is. That is to say, the plan ought to articulate where we're going. From my perspective, what I mean by "normal" is that we're using the funds rate once again as our policy instrument, running under a corridor or operating system in which the primary credit rate and the interest rate on excess reserves are the upper and lower boundaries, respectively, of that corridor. This Committee has

not decided on that, but I take that as my notion of what we think is a likely outcome for what's normal. But we need to communicate that. I note that if that is the normal plan, then this will necessitate shrinking the volume of excess reserves by a significant amount to get there, which will entail selling assets, not just relying on redemptions. And fourth, I would say that we need to return the composition of our balance sheet predominantly to U.S. Treasury securities.

Whatever exit plan we have, it seems to me, needs to get us to those places. This is going to be a tricky process to unwind from our extraordinary degree of accommodation. Having this Committee publicly commit to a numerical inflation objective could prove quite helpful to this process as it will help keep inflation expectations well anchored, which is essential to our success in exiting, as illustrated in the Tealbook scenario where inflation expectations, in fact, rise; I talked about that earlier, and that is not a very attractive scenario for us.

I think we can think about asset sales in two pieces. I think of there being an underlying trend of asset sales, at a basically low, modest level, that would go on a continuous basis; I call those continuing sales. You might also think about a set of conditional sales, sales that would expand more or less depending on the state of the economy, and, in fact, we might even relate those to when we choose to make funds rates decisions. Thus, we could establish a modest rate of selling assets, speed that up as we raise rates, and slow it down when we choose to pause, if necessary. I don't want to go into more details of that. The important thing is that by tying our asset sales to both unconditional and conditional decisions, meaning a steady state of sales and a set of sales that were related to our target interest rate, they will be state contingent and dependent on the same factors then that govern our interest rate decisions. I think such a systematic approach will reduce uncertainty in the markets about our exit plan and commit us to

getting back to normal in a timely fashion. I think those are the key elements in my mind that might make for a good plan.

Rather than spell that out in more details now, I'm going to be circulating a memo to the Committee in a few days with a little more detail about how I'm thinking about that, and I hope that it will provide some food for thought as we get ready for our April discussion. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I support alternative B, and I also support the changes that President Kocherlakota has recommended in the language in paragraph 2. I am more confident today than I was at our January meeting that an expansion is taking hold, and although I expect headline inflation to be close to 2 percent this year, I expect core inflation to rise only gradually toward 2 percent over the next few years.

The most significant risk I see on the horizon is that the pass-through from oil and other commodity prices to core inflation proves to be much greater than the empirical evidence suggests it will be. As we talked about today, one mechanism through which this could occur would be for persistently high headline inflation to destabilize longer-run inflation expectations. Of course, the key to stability of long-run inflation expectations is policy credibility, and we should do everything we can to buttress the confidence in our resolve to maintain price stability. That's one of the reasons, like President Plosser just mentioned, that I support publicly announcing an explicit numerical inflation objective. And with the potential for inflation expectations to be more volatile with energy and commodity price shocks, I think the sooner we clarify our inflation objective the better.

Finally, given Brian's comment, tapering of our final asset purchases doesn't appear to be necessary. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. I'll be brief. I generally support alternative B for today, with an eye toward a version of alternative C at a future meeting. I would not change the extended period language as it is changed in alternative C any time soon. I think as soon as we do that, it will signal imminent rate hikes. So I think we want to be very careful about that. I counsel patience for today because I'd like to gather more information on developments in the Middle East and North Africa, and I would like to get past the late March period, which is supposed to produce a deal in Europe. So I'd like to get more information on both of those situations. Hopefully, those situations will not develop into full-fledged global macroeconomic shocks, and we'll be able to assess the situation at our next meeting.

I have a few comments on alternative B. In paragraph 2, the phrase "limited pass-through to underlying inflation" makes it seem as though core inflation is a goal in itself. However, President Kocherlakota has conveniently eliminated my concerns here. So I fully support what he has suggested. He gets exactly to the ideas that I wanted to get through, which are that what we want to convey is that we think this is temporary, and we're going to watch the situation closely, which I think is what the change does.

I would like the pace of \$80 billion, which is down in paragraph 3, to be included in the statement. I think that could be done here with little fanfare. That would give us a dimension on which we can adjust going forward. So I'd like that in there. Please insert sufficient passion with that part of my speech. [Laughter]

On tapering, my colleagues are wrong on this. You should be tapering. So I'll be the excessively fussy guy. I think it's just prudent policy to engineer a smooth transition. I see little merit in an abrupt stop. Either nothing will happen, which is what you are all saying, or rates will jump up in that window and we'll get blamed for it. So I don't see any reason to do that. It should be easy to taper, and why not do it? It will take that risk off the table.

I do appreciate the sudden conversion of the Committee to rational expectations macroeconomics, but it's not the right policy at this juncture.

CHAIRMAN BERNANKE. Adaptive learning. [Laughter]

MR. TARULLO. Mr. Chairman.

CHAIRMAN BERNANKE. Yes.

MR. TARULLO. Jim, isn't there a little bit of tension between wanting to include the \$80 billion and favoring tapering?

MR. BULLARD. Well, if we're going to say it's \$80 billion now, we can adjust it if we're going to taper, I think.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. May I just ask for a clarification, Mr. Chairman? The last time we discussed the \$80 billion, as I remember, Michelle spoke passionately about not including it. Could someone just review the reason we did not include it last time very quickly before we proceed?

CHAIRMAN BERNANKE. Well, because it involved a change from the previous \$75 billion, and the concern was that there would be confusion. I think now the question that Bill English mentioned in his presentation was that, at this point, reinserting it might create some confusion of a different type about what our plans are. I put it in there because I do feel that we

did strike this compromise some meetings ago. President Bullard and I talked about the elimination of the unfortunate change in the rate of the pace of purchases at the last meeting. But the majority of the Committee last time felt that it was not appropriate to include it just for communication clarity. If there are others who want to change their views and want to reinsert, I'll give you a chance, so let me know later at the end of the round. Okay. President Williams.

MR. WILLIAMS. Thank you, Mr. Chairman. I favor alternative B. We're still falling well short on both parts of our dual mandate, and I expect that that situation will continue for quite some time. Therefore, the current very accommodative stance of monetary policy remains entirely appropriate. The recent oil supply shocks don't fundamentally change this calculus. This conclusion is illustrated by the very small funds rate responses to the oil and commodity price shocks reported in President Evans's memo, as well as other research using alternative methods. Of course, the success of this strategy is dependent crucially on maintaining well-anchored inflation expectations, and in the current circumstances, then, it's important to note there are still no signs that the rise in headline inflation is spilling over in any significant degree to underlying price or wage inflation or into longer-run inflation expectations. Of course, as many of you have already noted, we must watch these developments very closely and be ready to adjust policy as needed.

I very much like the wording President Kocherlakota came up with. I do have a slight tweak to that. If you look to the phrase—let me see if I can read this right—“but it will pay close attention to the evolution of overall inflation and inflation expectations,” given that we've gotten rid of the “core” idea, I would suggest deleting the word “overall” there.

CHAIRMAN BERNANKE. I think that's a friendly amendment.

MR. WILLIAMS. And finally, I am opposed to excessive fussiness myself, so I do not see the benefits, really, of the tapering.

MR. PLOSSER. Mr. Chairman.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. I am fine with the suggestion that President Williams made. I think that's good. I do think, just to give the staff and others some food for thought, we also use the phrase in this statement several times, "underlying inflation rate"—is that a code word for "core"? And I think as we try to move away from the language of "core," thinking about how we use the phrase "underlying inflation" is something that I think we need to give some thought to in the future.

CHAIRMAN BERNANKE. So just one word on that, which is that in an inflation-targeting regime, we would be talking about medium-term objectives. And that's really what we have in mind here. I think that "underlying" abstracts from the temporary fluctuations associated with commodities.

MR. PLOSSER. So we might want to think about moving toward language—

CHAIRMAN BERNANKE. One way to change that is we would move toward a medium-term type of description.

MR. PLOSSER. Exactly.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. As I think we have all noted around this table, the recovery continues to gain strength and increasingly appears to be sustainable, and there have been significant recent improvements in the labor conditions. While we would all like to see stronger growth and lower unemployment, the fact remains that the economy is

undergoing a major and necessary rebalancing that includes the deleveraging of consumers, businesses, and financial institutions. Thus, having this kind of economic growth in that environment is, I think, an impressive thing. Now, this process will take time, and maintaining a zero rate is as likely, in my opinion, to impede the process as it is to help it. You heard around the table that we are seeing new leverage being introduced almost as we speak.

I also want to comment on President Rosengren's point, which I think is an important one and a good one, but I think he has it backwards. Low rates are, in fact, in place and designed to increase asset values, and that's what they're doing. I gave the example of agriculture, because it is immediate, I know it, but it is an example; there are other asset values that are increasing fairly significantly now using leverage. And I think this increase, whether it's an acquisition of a company to expand under very low interest rates that causes an appreciation in value, has to be taken into account. So if you are going to now have supervision calibrate the movement in the asset value that your monetary policy was designed to increase, you are going to have to have your army stand pretty tall to do that.

If you take, for example, this agriculture situation, we can go into a bank, and the loan-to-value ratio for the land has been priced up to 70 percent, which isn't a bad number, and if you look at it with the prices and the cash flow you say, "Ah, that's a great deal. It should pay off. Let's stress test it." And you say, "Well, if you have 300 or 400 basis points, it's too low, because those prices will come down." What do you tell the banker? Raise capital? Do you classify the loan? No, because the cash flows are good, the asset value is there, and the appraisal is terrific. The problem is, in that situation—and there may be others—you also have a GSE down the road who is making loans for agricultural land that are sweetheart deals. So you tell the banker to get out of the way? The problem is, the policy that we have taken on is designed to

move asset values, and it's working. The problem is: How long do you let it stay in place? My point is that we need to move to a more balanced policy. Specifically, we need to be, again, preparing the market for a rate increase soon, so that you don't get the imbalances that a collapse, whether in agriculture or the high-yield market that we talked about earlier, where yields are at historical lows. That is what we need to be thinking about.

I see little need to continue purchasing longer-term Treasury securities. Instead, I recommend the purchases end sooner rather than later, and at something less than the number that's been tossed out there. I also recommend that we begin to form an exit strategy as soon as next time, if not sooner, to stop reinvesting principal payments from our securities holdings and to allow the size of our balance sheet to begin to stabilize and shrink. Also, I continue to recommend that we change the forward guidance on the targeted level of the federal funds rate, because this banker I'm talking to says, "You've got to let rates low for an exceptionally long period."

The point is that we are still in the process of crisis policy that's keeping rates artificially low, moving asset values up, causing these banks and others in the market to take on increasing risk by design. Supervision, as good as it may be, can't offset or fine tune any better than monetary policy can fine tune. And that's what I'm really worried about. I am just pointing out that our current highly accommodative monetary policy needs to be turned down—not made tight policy, but needs to be turned down—and the sooner the better, so that we don't create a new set of financial imbalances and develop longer-term inflationary expectations, because if we wait until we know we have it, it's too late. If history has taught us anything, it has taught us that.

So that's where I am on this. I know I am outside this Committee's boundaries, but I really strongly feel we are on a path that has a whole new set of issues that is coming at us, not next year, but in the long run. That's why I'm also concerned about an intermediate type of discussion, when the long run is where we really are setting things up for future challenges.

So that is my issue around asset values. It is not just agriculture. I think that's important. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. I support alternative B, but I do have some suggestions on language, and I'd like to get to those in just a moment. But first, I'd like to comment on why I think B is the correctly calibrated policy for the situation.

I have a pretty mainstream view relative to those around the table regarding the most likely path of the economy. I see the most probable path as continuing expansion at a moderate pace, continuing but gradual employment progress, and acceptably well-behaved and stable underlying trend inflation. So that's a mainstream view.

What has changed in my assessment of the situation is the range of risks and plausible negative scenarios that would deviate significantly from a baseline scenario. Analysis by my staff suggests that an immediate, large, and sustained-for-some-period rise of oil prices would push the economy close to recessionary territory. At the same time, I take seriously the risk identified in the Tealbook alternative entitled "persistent rise in inflation." In that scenario, high and rising commodity prices lead to an unanchoring of medium- and longer-term inflation expectations. I think these two negative but opposed risks are very roughly balanced, but if I had to rank order them today, I would give a little bit more immediacy and weighting to the higher inflation concern. That said, I don't think there is yet compelling evidence of a magnitude that

requires a response that longer-term inflation expectations are becoming unanchored. But I would note, as I did in the economic go-round, that the TIPS indicators are at the top end of the range we've been depicting as stable, and the recent Michigan survey involved a tick up of longer-term household inflation expectations.

A firming of policy, as others have suggested, may be needed sooner than we would otherwise intend. But I think any signaling of that change before we are more certain it is needed will create unnecessary volatility in asset prices. For that reason, I would prefer not to change the current asset purchase program, and I oppose the tapering idea. Nor would I change, at this point, the "extended period" funds rate guidance.

So my basic thought is: Stay the course for the time being. With employment levels improving, but having still so far to go to reach the desirable and achievable position, I don't favor a tightening action as in alternative C. Likewise, because I see rising inflation borne of shifting expectations as a real risk, I don't support alternative A. So net-net, I think B is the right answer at this juncture for the economic circumstances and the array of plausible negative developments.

Let me comment on statement language. First, I like President Kocherlakota's suggestions that refine the language in paragraph 2. Regarding the characterization of inflation and commodity price rises, as I commented in the previous round, I think describing measures of underlying inflation—and per President Plosser's recent question, I take that to mean, technically, core and trimmed mean PCE measures—as "subdued" somewhat misrepresents recent activity in those measures. I am concerned that this language could make the Committee appear out of touch. Over the past three months, all measures of inflation have risen, and for that

reason, I prefer a description of measures of underlying inflation that says: “Measures of underlying inflation, while firming recently, remain low.”

In paragraph 4, I think we repeat the “subdued” language. My concern with that repeat is, one, it’s redundant; and two, as I have just suggested, it’s not quite aligned with recent data movement and could serve to antagonize the public, conceivably, and ultimately undermine our credibility. So in paragraph 4, I would simply suggest that we delete the language starting with “including,” so that the sentence reads: “The Committee will maintain a target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions are likely to warrant exceptionally low levels for the federal funds rate for an extended period.” My concern, Mr. Chairman, is around not only the use, but the repeat use of the word “subdued.”

Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. So looking at that for a second, has there been a significant movement in core up? I don’t think on a 12-month basis that’s really the case.

MR. LACKER. The three-month rate rose to 1 percent.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Yes, just a suggestion. I agree with President Lockhart about the “subdued” language—it makes me a little nervous. Couldn’t we just say that “Inflation expectations have remained stable, and measures of underlying inflation have firmed”?

CHAIRMAN BERNANKE. No. How about “have remained low”? How is that? Would that work for you, President Lockhart? I think the part about getting stronger and firming—I think that goes against what we are trying to say.

MR. LOCKHART. Well, we want to say that they’re not falling anymore.

VICE CHAIRMAN DUDLEY. It's still a subdued trend, though. It's a trend, as opposed to a recent movement.

CHAIRMAN BERNANKE. Well, you don't like the word "subdued." "Low" means low. They're low. They're not trending anymore. We got rid of "trending downward." I wouldn't change paragraph 4 very lightly, Dennis, because that's such an important paragraph. Would you be okay with changing "subdued" to "low" or "have remained low"?

MR. LOCKHART. This is at the end of paragraph 1?

CHAIRMAN BERNANKE. Paragraph 1, yes.

MR. LOCKHART. "The measures of underlying inflation have remained low"?

CHAIRMAN BERNANKE. Yes. Is that okay? What do you think? Anyone?

MR. LOCKHART. Well, my concern is that the attention of many of our audiences is going to be on the last three months, not the trend, as Bill is suggesting, and that we are inviting a view that we are not in touch.

CHAIRMAN BERNANKE. Well, this is a question of describing the medium term, and we may want to think more about how we will explain our medium-term objectives in the future. But for the time being, we're talking about the "underlying trend," which basically means indicators like trimmed means and so on that have not really moved much.

MR. LOCKHART. Maybe we could say, then, "The measures of trends of underlying inflation have remained low." So you emphasize the word "trends."

MR. FISHER. Mr. Chairman?

CHAIRMAN BERNANKE. Yes?

MR. FISHER. I think I'm pretty hawkish on this issue.

CHAIRMAN BERNANKE. Yes.

MR. FISHER. I'm very concerned about inflation. I think to say "low" is even worse than saying "subdued," and I prefer to keep the language as it is. I'll argue some other things when I have my intervention, but if we say "are low, the trends are staying low," I think it undermines our credibility. I think it's a mistake.

CHAIRMAN BERNANKE. All right. Why don't we just put this in the inventory of stuff we are going to come back to at the end?

MR. PLOSSER. Put it in the parking lot.

CHAIRMAN BERNANKE. Dennis, anything else?

MR. LOCKHART. I'm finished. Thank you.

CHAIRMAN BERNANKE. Okay. President Fisher.

MR. FISHER. I'm sorry I jumped in, then. I didn't know I was going next. A couple of things are evident from this conversation. One is that there is a feeling at the table that the recovery is gaining momentum. The second is that we're obviously taking caution to express ourselves on inflation carefully. The third is that President Rosengren's statements are getting longer. I view him as a model of efficient expression, and I'm not sure how to read that, President Rosengren, but I'm going to study the entrails to try to understand it. And the fourth is, I'm delighted to hear President Lacker talk about how the average businessman or businesswoman thinks.

MR. LACKER. Took some imagination. [Laughter]

MR. FISHER. Yes, sir. Back to the subject matter. I am against tapering. If I felt that there was any risk that we might advocate tapering, or extending the program, then I would argue alternative C, because I would like to begin tapering now down to lower levels. But I read the drift at the table, and I am encouraged by the likelihood that this experiment with this extra phase

of LSAPs, whether you were for it or against it, as I was, is coming to an end. And I can live with alternative B under that assumption.

I'm sorry to do this, because I know President Tarullo is about to squirm out of his seat.

MR. TARULLO. Governor Tarullo.

MR. FISHER. Governor Tarullo. Well, maybe someday, "President" Tarullo. One slight editorial suggestion—I apologize—and that is with regard to a suggestion made by President Plosser in writing. Our mandate does not refer to the unemployment rate. The suggestion I have is in the second paragraph. Instead of what we have as a second sentence, I would say, "Although the level of unemployment has recently declined, it is still elevated." Take out the word "rate." This is a problem that we have to deal with. We are talking about the level of employment or unemployment in our mandate. I also don't like the word "remains." "Remains" has a stickiness to it, and it sounds like we are reluctant. But the fact is, it is still elevated, and so I would say, "Although the level of unemployment has recently declined," which is a fact, "it is still elevated." Then you could go on to say, "The measure of underlying inflation"—I think President Kocherlakota's suggestions are excellent.

I do not believe we should put a pace of \$80 billion a month into the statement. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. The last thing—repeat the last thing you said.

MR. FISHER. Sir?

CHAIRMAN BERNANKE. I didn't understand the last thing.

MR. FISHER. I do not believe we should put the \$80 billion a month in the statement. Thank you.

CHAIRMAN BERNANKE. All right. Thank you. Governor Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I favor alternative B with the changes proposed by Presidents Kocherlakota and Williams. I am comfortable with the stance of policy for now. I favor completing our announced program of Treasury purchases and maintaining the “extended period” language.

The outlook for economic growth has improved somewhat. But regardless of how one reads the labor market, there is an awfully long road to travel to attain our maximum employment objective. In addition, both headline and core inflation remain subdued, in spite of rising commodity prices. I therefore believe we can be patient in withdrawing accommodation. That said, recent commodity price increases do create inflationary risks. And while past experience provides comfort, it does not guarantee future results. We must certainly monitor incoming data carefully, and it is conceivable that we may need to respond. Indeed, all along, our “extended period” pledge has been tied to economic conditions, including subdued inflation trends and stable inflation expectations.

With respect to tapering, I see no particular need, given our past experience and Brian’s discussion, to taper our purchases as the program winds down. On paragraph 3, therefore, my preference is to exclude the bracketed language. Information on the pace of purchases would be needed if the Committee intended to vary the pace in coming months, but without tapering, I believe it would be more confusing to markets to include wording we omitted last time.

Looking ahead, the risks to the outlook for both inflation and economic growth have, to my mind, increased considerably. We need to be prepared to respond to whatever developments unfold in the days ahead. So even as we return to planning for an eventual exit from our accommodative policy, I consider it important to remain prepared to provide additional stimulus should downside risks to the expansion materialize.

CHAIRMAN BERNANKE. Thank you. Governor Duke.

MS. DUKE. Thank you, Mr. Chairman. I favor alternative B. I do believe the recovery is on firmer footing, but that belief is tempered by uncertainty about the effect of higher gas prices on consumer and business confidence, uncertainty about the effect of unrest in the MENA region, problems in peripheral Europe, and the horrors unfolding in Japan. And it's also tempered by the memory of our belief this time last year that the recovery was gaining momentum.

I would applaud the changes offered by Presidents Kocherlakota and Williams, and I believe that they are more significant than simple wordsmithing. I think one of the biggest difficulties we face in our communication and our credibility is the disconnect between a discussion of headline, underlying, trimmed, core inflation, and pass-throughs that takes place in this room and the conversations that take place among the general public and business people about the rising costs of gas, food, and health care. So I think framing our discussion of inflation in terms of near term and medium term is probably easier for normal people to understand than any of these other measures.

Second, to the pace of \$80 billion a month, I think we learned at the last meeting that it creates confusion to make small changes to the amount often necessitated by technical factors. And we now have evidence that the stock is more important than the flow. I think a consistent communication of the total stock that we intend to purchase or, when the time comes, to sell across a definitive time frame will give an indication of the pace of sales without creating another item that we have to potentially adjust. So I would not be in favor of adding that one. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. I favor alternative B with Narayana's first-degree amendment and John's second-degree amendment. I am sympathetic to Dennis's comments on the language here, but I guess, Dennis, my reaction is, we've already added the two sentences in paragraph 2. I favor the addition of the last clause, the "close attention" clause, to the second of those sentences for many of the reasons that you articulated. On my theory that people pay attention to the changes in the statement as much as to what is in the statement itself, I think people's attention will already be drawn some to the recent inflation question.

On Richard's suggestion, I am indifferent, Mr. Chairman, but I certainly have no problem saying, "Currently, unemployment remains elevated," as opposed to "the unemployment rate." And I probably feel a little bit more about that now than I might have previously, precisely because it's not at all clear to me what the unemployment rate is doing right now.

That's all. Thank you. Oh, and the \$80 billion a month, I don't have strong views on that.

CHAIRMAN BERNANKE. Okay. Governor Raskin.

MS. RASKIN. Thank you, Mr. Chairman. I also support the action described in alternative B. I am comfortable with the current stance of monetary policy and underscore the need for vigilance and care as we watch the current course of commodity prices and their potential for dislodging stable inflation expectations. That said, the path to full recovery is prolonged by several risks. One significant risk that has been underscored today is the extent to which slowdowns in consumer spending and continued weakness in housing markets raise concerns about the strength and durability of the recovery. The run-up in energy costs, if it persists, also could weigh on household spending and on non-energy goods and services, and the turmoil in the Middle East and the disaster in Japan may exacerbate this effect. This question

alone suggests a high threshold for making an adjustment to the purchase program.

Unexpectedly discontinuing or reducing the current program at a time of heightened uncertainty regarding households' abilities to absorb higher food and gas prices would prematurely inhibit the consumption component necessary for more-robust growth.

I also support the President Kocherlakota changes to paragraph 2, as further amended by President Williams, and look forward to debate on changes proposed by President Lockhart and President Fisher.

CHAIRMAN BERNANKE. Thank you. Vice Chairman.

VICE CHAIRMAN DUDLEY. Okay. Thank you, Mr. Chairman. Before I talk about the choices for this meeting, I just want to talk briefly about the risks in terms of higher inflation expectations for our choices over the medium term.

In the economic go-round, I raised my concerns that longer-term inflation expectations could become unhinged, and that would obviously be problematic in terms of inflation. But I want to stress here that I also worry about the other side of the equation, that premature tightening could wrack a recovery that is still fragile. In this regard, the U.S. experience in 1937 is quite instructive: Commodity prices were rising quickly then, wholesale inflation was climbing noticeably, and even consumer prices were rising despite a tremendous amount of slack in the economy. What happened in 1937 is that Federal Reserve officials changed their communication strategy and began emphasizing the risks of higher inflation, and they also raised reserve requirements. What happened was that the U.S. economy quickly fell back into recession. So we should be concerned about inflation expectations and the risks that could add to inflation, but we really should understand that it is a two-sided risk.

With that said, for the time being, my preference is to be as patient as we can be and to work as hard as we can through our communications to try to keep inflation expectations well anchored. Some of this we can control through our communications; some of it we can't control. But we should do the things we can do to keep inflation expectations well anchored by how we communicate with the market.

In terms of today's decision, I would support alternative B. I think it accomplishes what we want to do. It recognizes the improvement in the outlook. It makes it clear that we do not expect commodity price pressures to feed through to underlying inflation. And I think it makes no changes, as written, in terms of our policy message.

There is no question in my mind at this point that we should complete our \$600 billion Treasury purchase program, because it is helping to achieve our objectives. I don't think it's necessary to taper purchases as we come to the end of the program. I don't think there's any likely substantive benefit. Market participants do not expect tapering. So I think that putting it in would just create questions about what we are up to, as opposed to actually accomplishing anything constructive.

I would not insert the "\$80 billion a month" phrase for the same reasons that we didn't insert it last time. It would needlessly create uncertainty about why we put it back in.

In terms of the other changes, I am happy with the Kocherlakota change and the Williams change. As for President Fisher's change—I'm perfectly comfortable living with "unemployment" as opposed to "unemployment rate."

CHAIRMAN BERNANKE. Okay, thank you all. Well, as I said earlier, I don't think this is the time to be making major changes in our policy, but I understand the concerns and issues that people have raised, and there are risks, I think, in both directions.

I think that April will be a very important meeting. It will be a meeting where I hope that we will be able to provide clarity to the markets on our future plans regarding purchases, at least, and hopefully we will make progress on exit strategy discussions as well. So, again, that will be an important meeting.

With respect to the statement, people have focused on alternative B, which, of course, I agree with. In paragraph 2, there has been strong acceptance of President Kocherlakota's amendment with the Williams addition, which I will read quickly: "The recent increases in the prices of energy and other commodities are currently putting upward pressure on inflation. The Committee expects these effects to be transient, but it will pay close attention to the evolution of inflation and inflation expectations." In general, I don't like to make unnecessary changes, but I guess I am okay changing the "unemployment rate" to "unemployment," if that makes people more comfortable.

MR. PLOSSER. Well, I suggested that in my memo earlier, so I think it's a good idea.

MR. EVANS. Mr. Chairman, can I offer a comment on that?

CHAIRMAN BERNANKE. Okay.

MR. EVANS. This is a very serious change, and I'm not sure I understand it. The language on the unemployment rate is very familiar; we all understand it. We have spent a lot of time talking about what a natural rate of unemployment is, and we have talked about structural unemployment. So we sort of understand 5, 5½ percent, whatever your favorite number is. Now, with the new language, we are talking about the level of unemployment. How many millions of people are unemployed today, and do we have an idea of how many million unemployed it will have to be so that it will no longer be "elevated," but it will be "improving"? What is the right number when we get to an acceptable level? Is it zero million unemployed? I

just don't know the answers to these questions, but with all of the time we spent trying to educate people on the natural rate, we might have to do that on the levels.

CHAIRMAN BERNANKE. Okay. I think people would read that as "unemployment rate." But I'll tell you what, we are going to take straw votes in just a minute on a couple of items. That's one of them. The second one is another suggestion of President Plosser, to strike the word "somewhat" in the second line. And the third is President Lockhart's. I'm trying to find a solution at the end of paragraph 1. How about "and inflation trends remain low"? Is that better?

MR. LOCKHART. You are emphasizing the word "trends," which is just a longer term than the last three months.

CHAIRMAN BERNANKE. As opposed to "underlying." Okay.

MR. LOCKHART. I am not sure you have enough people supporting the view that the word "subdued" is a problem around the table. So you should really go with the majority of the Committee.

CHAIRMAN BERNANKE. Well, that's what I plan to do. [Laughter] All right. Let me ask, is there any further comment on "somewhat," which slightly strengthens it? Is there any objection to making that change? Anyone?

MR. FISHER. Which one is that, Mr. Chairman?

CHAIRMAN BERNANKE. Dropping the word "somewhat" in the second line—is that okay with you?

MR. FISHER. I'm in favor.

CHAIRMAN BERNANKE. Okay. All right. We'll do that. The second proposal is to change, at the end of B1, "measures of underlying inflation have been subdued" to "and inflation trends have been low."

VICE CHAIRMAN DUDLEY. "Trend" "low" is a funny construction.

CHAIRMAN BERNANKE. What's the right construction?

PARTICIPANT. Moderate.

VICE CHAIRMAN DUDLEY. I'm not sure, but—

CHAIRMAN BERNANKE. "But inflation trends are subdued"—would that be any better?

MR. PLOSSER. I think one of the efforts here is to convey the notion that we have expressed concern about falling inflation. We are confusing rates and levels, and so, while it may be subdued, it has also stabilized in the sense that we are no longer getting more disinflation. I guess that is the concept.

CHAIRMAN BERNANKE. Well, I was suggesting, "measures of underlying inflation remain low," which suggests that they are low but not falling anymore. That doesn't help you, though.

MR. PLOSSER. I prefer "subdued" to "low," but—

MR. FISHER. Yes, I do, too.

VICE CHAIRMAN DUDLEY. I think it's fine the way it's written.

MR. LACKER. We use the same language again in paragraph 2: "measures of underlying inflation." You know, making that variation—

CHAIRMAN BERNANKE. Fine, fine. Okay. I'm worried about time. With apologies, so the only change we're making in B1 is to drop the word "somewhat" in the second line. And,

finally, with apologies to President Bullard, I didn't hear much support for putting in the \$80 billion. So let's strike that. Again, with apologies. Any further comments? President Lacker.

MR. LACKER. Can I respectfully suggest we change the word "transient" to "transitory"? It has a less ephemeral connotation, and it is I think a more broadly used term.

CHAIRMAN BERNANKE. Any English majors who care to comment on "transient" versus "transitory"? [Laughter]

VICE CHAIRMAN DUDLEY. I think "transitory" is a little better.

CHAIRMAN BERNANKE. All right. "Transitory" it is. Anyone else? Any comments? Bill.

MR. ENGLISH. I'm sorry. What was the decision on "unemployment" versus the "unemployment rate" in the second sentence of paragraph 2?

CHAIRMAN BERNANKE. We haven't decided.

MR. ENGLISH. If I could just point out one thing there. I think the intent when that sentence was originally written, which I think was following the October videoconference, was to point to the long-run projections in the SEP, which is why we picked up the unemployment rate.

CHAIRMAN BERNANKE. All right. It's linked to the SEP. That's right.

MR. ENGLISH. So that would change if we made it "unemployment" rather than "unemployment rate."

CHAIRMAN BERNANKE. Well, we are going to talk in a few minutes about linking up our statement and our policy to the SEP more explicitly, and "unemployment rate" is what we forecast.

MR. KOCHERLAKOTA. I agree with President Evans. This would be a major change and something we should do with tremendous contemplation and thought, not in the last three minutes.

CHAIRMAN BERNANKE. Okay. Again, with apologies to many good suggestions, we are making the changes that were suggested by President Kocherlakota with the Williams addition, and we are dropping the word “somewhat” in the second line. If there are no further comments—Matt.

MR. LUECKE. This vote will cover alternative B on page 3 with the changes indicated by Chairman Bernanke, as well as the directive for alternative B on page 7 of the handout.

Chairman Bernanke	Yes
Vice Chairman Dudley	Yes
Governor Duke	Yes
President Evans	Yes
President Fisher	Yes
President Kocherlakota	Yes
President Plosser	Yes
Governor Raskin	Yes
Governor Tarullo	Yes
Governor Yellen	Yes

CHAIRMAN BERNANKE. Thank you very much. We have an additional item on communication. What I would like to recommend is that we go get some lunch, come back to the table, and have a brief discussion, if that would work.

[Lunch break]

CHAIRMAN BERNANKE. The last substantive item is a recommendation on communications from Governor Yellen’s subcommittee. As you know, she is going to talk about the idea of having press conferences.

I will be happy to answer questions, and so on, from my perspective as well, but I just want to say one thing before I turn the floor over to Janet, which is that I want to thank President

Plosser and his colleagues for the good work they did on a numerical objective for inflation. I just want to be clear that this discussion today is motivated by timing considerations. It is not intended to be a substitute—I think, in fact, it will be a complement—for our discussion on the numerical objective, which Governor Yellen’s subcommittee will take up in due course and bring back to the Committee. So let’s keep this discussion today separate from that, if we could, and see what progress we can make. Let me turn this over to Governor Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I would like to begin with a few comments concerning the subcommittee’s rationale for moving ahead with press conferences. And I’d like to then highlight a couple of aspects of the arrangements that we are recommending.

When the subcommittee on communications was reconstituted last fall, a crucial element of our mission was to consider approaches for ensuring that the public understands both the consensus of the Committee and the diversity of views among individual participants. One obvious pitfall of our existing communications framework is that after the end of each blackout period, the timing and sequencing of participants’ speeches and other external communications has been rather random. And it’s become increasingly apparent that such a random ordering can contribute to public confusion about our monetary policy decisions.

In considering how to redress this problem, we looked closely at the experience of other central banks, especially ones where monetary policy decisions are made by committees. Although the communications practices of foreign central banks are diverse, we found it notable that press conferences are held by all of the major foreign central banks, and, indeed, by nearly all central banks in foreign industrial countries, the only exceptions being Australia, Denmark, Iceland, and the national central banks of the euro area. Such press conferences are uniformly seen as an important and effective communications tool. Moreover, for central banks like the

ECB and the Bank of England, regular press conferences seem to have been particularly helpful recently in highlighting the consensus of the policy committee in a context where a diversity of views has been readily apparent to the public.

In light of those considerations, the subcommittee recommends that the Chairman conduct quarterly press conferences in the afternoon after the conclusion of each two-day FOMC meeting. The ECB, the Bank of England, and the Bank of Canada each conduct press conferences while the markets are open. The purpose is to allow any news to be digested into market prices.

Now, to accomplish this, we would need to issue the FOMC statement somewhat earlier after two-day meetings. And, in particular, we would propose that the first day of each two-day meeting would start two hours earlier so that we could conclude by 11 a.m. on the second day, issue a statement at 1:15 p.m., and then begin the press briefings at 2:15 p.m.

The approach recommended by the subcommittee would ensure that the Chairman is the first person on the Committee who communicates with the public after each two-day FOMC meeting. As in each of his speeches and testimony on monetary policy, the Chairman would try to convey the sense of the Committee's thinking at these press conferences while making note of the diversity of views, as appropriate. Of course, given the dynamic and interactive nature of a press conference, it is important to recognize that the Chairman would need to have full ownership of the answers that he gives in Q&A, and we recommend that this same principle would apply to any prepared remarks that he would present at the start of each press conference.

One significant benefit of initiating these press conferences is that there could be a corresponding shortening of the blackout period following each two-day FOMC meeting. Needless to say, no Committee participant should be present at the press conference themselves,

and FOMC participants should not have contact with media representatives afterward. Moreover, the subcommittee recommends that all forms of external communications—that includes speeches, editorials, and media interviews—would be embargoed until the end of the postmeeting blackout period. But the subcommittee thinks that a blackout period ending at noon Eastern Time on the day after two-day FOMC meetings would be appropriate. Such an arrangement would help keep public attention focused on the FOMC meeting statement and the Chairman's press conference for a full media cycle, including the TV news on Wednesday evening, as well as the newspapers on Thursday morning. Under these arrangements, each of you would be completely free to communicate your own individual views on monetary policy starting on the Thursday afternoon after each two-day FOMC meeting. I should also note that our subcommittee has not yet reached any conclusions about other potential changes in the blackout period, such as the timing of the blackout for one-day meetings. Rather, any such recommendations will be brought forward for your consideration at a later date.

Our subcommittee believes that press conferences could be particularly useful if the Chairman is able to make reference to the contours of the latest SEP projections in his opening remarks as well as in Q&A. Such an approach would likely draw greater public attention to our economic outlook and could be helpful in explaining how the Committee's policy strategy is informed by our longer-run projections for output growth and unemployment and our individual assessments of the mandate-consistent inflation rate. And, in fact, by incorporating information from the SEP, we believe that these press conferences would significantly enhance FOMC communications regarding the Committee's overarching policy framework as well as our specific policy decisions.

Of course, to the extent that these press conferences draw greater public attention to the SEP, it will be helpful to keep in mind that the SEP itself is a communication tool that may well evolve somewhat over time. For example, one fairly obvious limitation of the SEP is that it doesn't include any information about our individual assessments regarding the appropriate path of policy, even though our projections for economic activity and inflation are contingent on these policy assessments. The Chairman may wish to respond to any such questions by noting that potential enhancements to the SEP will be considered as part of the Committee's ongoing efforts to enhance our public communications.

Finally, the subcommittee recommends moving forward with these press conferences starting with the April FOMC meeting. The April meeting is a two-day meeting. It is the last meeting until October that will not be followed with Humphrey-Hawkins testimony. That meeting may be particularly consequential, because the Committee will be deciding whether to complete the final phase of our \$600 billion asset purchase program, and we may well be considering certain aspects of our policy strategy over horizons extending beyond the end of June.

About 10 days ago we circulated—and I hope you have in front of you—a set of questions to guide our discussion now. I am not proposing we have a full go-round, but it would be very helpful if you would make note of any specific concerns you might have about moving forward with this initiative, and if you would indicate whether you agree that the first such press conference should take place following the April FOMC meeting. Let me stop there and, rather than have a full go-round, please feel free to make comments or pose questions to either of us.

CHAIRMAN BERNANKE. Let me add quickly that I am very comfortable with this proposal. I think the difference between the Fed and other central banks has become quite striking—every other central bank does have this method for communication.

I am sure it is something we will learn about as we go; we'll be learning by doing. But I want to assure everybody that my objective is both to present the modal view—that is, the policy decision—quickly after the meeting, or at least quarterly—and to give some sense of what was discussed and what diversity of views there was. So my goal would be to represent the views of the broad Committee.

In terms of documents, my assumption is that they would have in advance the Committee's statement, which we would continue to develop as we do now, and they would also have just the SEP numbers—not the full narrative description, but the numbers in the projections. I would simply go over those numbers, and I would try to talk about the day's policy decision. I think a useful objective here is to try to put the policy decision in the context of the longer-term SEP, which then in turn will generate more interest in the SEP. But let me stop there, and, again, either one of us can answer questions, or we would be eager to hear your comments.

MR. HOENIG. I have a question, and I do have a comment. Governor Yellen, when you say “full ownership” of remarks and Q&A, what do you mean by that, in terms of the Chairman's having full ownership of that? In terms of, he is responsible for it, or in terms of, it reflects the full range of views?

MS. YELLEN. I guess what I mean is that if he makes some remarks, they are his remarks as opposed to something that he would need to have approved by the Committee. The FOMC statement would remain, obviously, a full Committee statement.

MR. HOENIG. Okay. The second question that I have is around the idea that we are comparing ourselves with other central banks. I may not have this right, but if I read it right, the United Kingdom doesn't actually have a press conference after its meeting; it's when it releases its projections. So that's different than what you're suggesting.

MS. YELLEN. That is different.

MR. HOENIG. And that is not unlike our Humphrey-Hawkins—I mean, in the sense that we put out our projections and respond to questions before Congress. My other point is—and I'm a little uneasy about doing this, but—at the ECB, they don't produce minutes, and they don't have a vote. So it's a different model altogether than what we're talking about here. And my concern around that is, as we compare ourselves with them, we are not comparing the same things. There's a question of handling the difference in views. We have a broad range of views, sometimes broader than others, and I know that the Chairman represents those, because he does the summaries very nicely. But we do have minutes that are released, we do have a statement, and if we want to really have that incorporated, my question is: Why don't we concentrate on moving the minutes up more quickly, so that you have them out sooner? And we also have transcripts that others don't.

This Chairman, I understand, would do it very well, but as you get the Chairman up there trying to represent very different views in this press conference, sometimes more different than others, the concern is that you get that out there clearly. And then, a day later we're out giving speeches, and if it doesn't line up, we're going to have some real problems. What we're going to do over time is be forced to the mean. That is, you don't want to get too far out of line, if you didn't quite hear it that way. And what people hear and do are sometimes quite a bit different.

So those are some of the concerns I have about going forward with this. And I apologize, I didn't send notes in, because I got to this later than I wanted to. But those are the things that occurred to me as I was reading this on the plane here.

MS. YELLEN. Dennis.

MR. LOCKHART. Janet, obviously, a press conference after four of our meetings a year really adds a great deal of clarification to what the Committee is thinking. Did you discuss at all whether any change in the statement format would be required at those meetings or at all?

MS. YELLEN. I don't think we are envisioning any change in the way the statement would be crafted. And we would be getting the statement out to the press an hour before the press conference begins, so that reporters have a chance to absorb it, and then ask intelligent questions at the press conference.

CHAIRMAN BERNANKE. To give an example, what the ECB does is they have a statement that the President reads, to start. And it consists, as I understand it, of several paragraphs of general outlook material prepared by the staff in advance of the meeting, and then a policy paragraph, which is similar to our statement, and then it's agreed upon by the Council.

VICE CHAIRMAN DUDLEY. I want to observe that before doing this, I would imagine we will be more inclined to change the statement when the Chairman is about to give a press conference, because he will be there to be able to explain it very quickly. So it may actually free up the statement a little bit compared to what it is right now, where we are very hesitant to change the statement, because we're always worried about how people will interpret it. This would probably mitigate that issue a little bit.

MS. YELLEN. Narayana.

MR. KOCHERLAKOTA. I'm going to say two conflicting things. On the one hand, I think—and this follows up on some stuff that Tom was mentioning as well—this is an institutional change, and it transcends any particular person who is the chair at this time. I think that we all have a great deal of confidence in Chairman Bernanke's ability and desire to communicate the broad cross-section of views. But this is going to be an institutional change that will transcend this particular individual.

On the other hand, I would say that—and, actually, this also follows on what Bill was saying—last August we had I think a one-day meeting, and at that meeting we made a change in policy in terms of reinvesting the MBSs. There were good economic reasons for doing that, but it was a very confusing period. I guess the question would be: Did you give any thought to doing this after every meeting? And the final thing I will say is that there are a lot of talented public affairs people around the system, and I, at least, feel like I can't get my PA people involved right now in this because it is Class I FOMC; they aren't Class I. If there is a systematic way to get the PA community involved in our discussions of communication, I think that would be good for the Committee.

MS. YELLEN. I guess on the issue of what happens after one-day meetings, the thought here was to begin in a more controlled way with two-day meetings. But there's nothing in this proposal that ultimately would rule out having this after other meetings as well, but we certainly didn't want to start there.

MR. KOCHERLAKOTA. I feel it's distinguishing the meetings in an unusual way. It's not like we only make important decisions at two-day meetings that require a lot of clarification. So if we are going to go down this path, I actually would suggest thinking about doing it every time.

MS. YELLEN. The distinguishing feature of the two-day meetings is the economic projections and the ability that that would give the Chairman to explain our overall framework and put decisions into the context of them.

MR. KOCHERLAKOTA. But those June projections would still be available in August.

CHAIRMAN BERNANKE. Michelle, what is the feasibility of ad hoc press conferences, if necessary?

MS. SMITH. If you've got something really important to say, an ad hoc press conference will certainly get the attention of people you are trying to communicate with. [Laughter] The bar is high for an ad hoc sort of gathering. Logistically, it's possible, if there's nothing that makes it impossible. So you could do it. The New York Fed would probably say that predictability of these sorts of things for market participants is preferred.

VICE CHAIRMAN DUDLEY. It helps lower the temperature level.

CHAIRMAN BERNANKE. No. I was just saying, in case of a situation like Narayana was talking about.

MS. SMITH. Certainly.

MR. ENGLISH. Another issue that you might want to think about is feasibility. The discussion today was such that we would not have been able to get a statement out at 1:15 p.m. So for one-day meetings, if we are going to have a press conference at 2:15 p.m. and get a statement out at 1:15 p.m., we are going to be beginning at 7 a.m. or we are going to be beginning the evening before. I think there is a question of, how quickly can the Committee get its business done? And if we seriously are going to have press conferences after one-day meetings, I am just not sure there is time to do it.

MS. SMITH. It might be helpful to mention that there are two basic models internationally. There is the Bank of England/Bank of Canada model that has these sorts of things four times a year that happen with the release of their projections or their inflation report. Then you have the ECB/Bank of Japan model, which is basically every meeting no matter what gets announced and on the same day.

I think what has come out of this is more of a hybrid approach. Not every time the Committee meets are you doing something that the world isn't prepared to accept and to understand. Sometimes it is. Sometimes it's more jarring; it needs some explaining. I think one vulnerability here was exactly Narayana's point, that you could have an important meeting at a time that doesn't sync up well with your quarterly plan, in which case you could improvise. You could decide to have the Chairman give a speech the next day or two days later and, really, we could pull that together. That is certainly possible. What you did back in the fall when you decided to embark on LSAPs was the Chairman had an op-ed in the *Washington Post* the next day. You could improvise to get your message out on those times, but we are blazing a hybrid path between what the world central banks have got going.

MS. YELLEN. Jeff.

MR. LACKER. I wonder, given President Kocherlakota's comment, whether there would be some hesitance to take actions in between press conference meetings, and I am not quite sure what the answer to that is, but I think it is worth considering.

The other thing is, why 2:15 p.m.? Why not on the hour? I have always wondered this about the statement. Is there something magic in markets about quarter after?

MR. TARULLO. It's the alignment to the constellations.

MR. LACKER. Alignment to the stars. [Laughter]

MS. YELLEN. The answer, I guess, is that the bond markets close at three.

MR. LACKER. Oh, three o'clock, right, when the bond markets close.

VICE CHAIRMAN DUDLEY. As late as possible so that you could actually get it out before the bond markets close.

MR. LACKER. Okay, great.

MS. YELLEN. Sarah.

MS. RASKIN. One question I have has to do with the scope of the rule, so to speak, and that is, I assume that the blackout period, although shortened, covers everybody, even individuals who may have dissented at the meeting; is that right?

MS. YELLEN. Absolutely. Everybody is covered. It would be until noon the next day. It covers everybody and all forms of communication on the economy or monetary policy.

MR. TARULLO. This is probably a good moment to indicate that I think the subcommittee proposal is fine, a good idea, although some of these issues do bear a little bit of thinking. I have to say, I am concerned about ending the blackout period sooner, and I'm concerned about it, I think, precisely because of the scenario Tom laid out, which is: Ben gives the press conference, and then there are a bunch of people waiting for 12:01 p.m. the next day to go out and give their own gloss on what's happened. And I fear that the dominant play here may end up being defecting, in which case you get a lot of people doing it.

I understand the notion of trying to give vent to different or dissenting voices, but I guess, because my observation has been that we have had plenty of dissent, and much of it public, and I'm not sure it has been particularly useful for the Committee as a whole, that maybe we want to rethink a little bit the acceleration of the end of the blackout period.

MR. LOCKHART. And as a practical matter, Michelle, can we produce a transcript that is in our hands in what would be, I guess, 22 hours?

MS. SMITH. Yes, we could. Our intent would be to have this webcasted live. It would be covered live, and we would have redundancy on the transcript. We have had brief conversations with the FOMC Secretariat about having the transcription service that puts the meeting transcript together also do that. And our experience is that almost every time the Chairman is out in public, a transcript gets produced by the news services quickly, sometimes very quickly. I e-mail it to you all pretty frequently. Sometimes it has got some slight spelling errors in it, but we would clean that up and get it to you very quickly, and you would have a video. The video of the entire event would live on our website.

MS. YELLEN. Charlie.

MR. PLOSSER. I'm generally very supportive of this. I think transparency is a good thing, as a general rule. I do share a little bit of the concerns about how this might work in different regimes with different Chairmen, and I don't know that I know the answer to that problem, but I think it's something to give some thought to.

The other thing is, I want to pick up on an observation that Bill made, which I thought is very interesting. I have often felt and expressed the view that our statements are very confining at times. Our language is very confining, and I've often said I wish I could blow up the statement every meeting and write a new one so that we don't feel so constrained about how we say things. Bill's observation was the thought that, well, might this be a mechanism where we can become more flexible in the way we write the statements, and I didn't hear anybody else say anything about that. I thought that is an intriguing idea, and I wonder what the subcommittee had thought about this or what other people might think about that. It was just a reaction.

MS. YELLEN. My own sense is that's entirely possible that we may come to view ourselves as having greater flexibility in the statement once the Chairman is just several hours later taking Q&A about our policy and commenting on it. But it's hard to predict exactly how that's going to evolve over time.

CHAIRMAN BERNANKE. We could look at the ECB and some other models to see what they do.

MS. SMITH. As people probably know, the ECB issues a very terse statement. Their policy statement is about one sentence long and just says what the council did. Then in Trichet's remarks at the press briefing, he does what you all do in your statement. So, again, it's a little bit of a hybrid.

MS. DUKE. I would like to respond to Tom's concerns and to say that I was probably the person on the subcommittee that was the most reluctant to come around to this idea for a lot of the concerns that you expressed. I guess what I was struggling with is, we had a statement that was the Committee's statement and then later on we had minutes that reflected what happened in the meeting. So my question was: If the Chairman is out there giving a press conference, where does that fit? Is it a restatement of the statement or is it a preview of the minutes?

And that's where, I think, using the SEP is a good way not only to draw attention to them, but to look at it in a little bit different light, so that now I view both the statement and the minutes as a check on, if you will, a Chairman who wanted to go out and just put forth one point of view because both of those are going to actually come out as well as statements made by others. So I think that weighs against the concern that this is out there for all regimes. I mean,

future Chairmen can go out and say whatever they want to, but it's going to be in the context of these other communications that are still going to be out there.

MR. KOCHERLAKOTA. One quick logistical thing, which is, you want to have some way to confine the scope of questions. You probably don't want to be taking questions about debit interchange, for example.

MS. SMITH: I'm happy to take any and all questions.

MR. HOENIG. Betsy, and to Governor Tarullo's point, one of the things that makes me a little bit uneasy is that you're talking about the blackout period. Well, the blackout period originally was because we didn't announce anything, and you had to wait until markets figured it out, and so you didn't want to get ahead of them. Now we have the statement, which mitigates that need. But now Governor Tarullo wants to extend the blackout period because the Chairman speaks, and we don't want people contradicting it.

I'm not sure that you're allowing for the diversity of views you get out there. And, you begin to say, well, we're going to confuse people more because the Chairman spoke here, and now we're going to have a speech that's a day and a half later. Those are things I think we ought to think through carefully because this is a regime change. This is a big deal in terms of what we're doing and how we are going to affect the dynamics of the Committee going forward.

Now, it's more of that long-term concern that I have.

MS. YELLEN. Dennis.

MR. LOCKHART. I think I heard Tom say, "extend the blackout period."

MR. HOENIG. No, no. I'm opposed to Governor Tarullo's point to extend it. I think it is inconsistent with why we originally had the blackout.

MR. LOCKHART. But isn't the practice today two days after the meeting?

MS. SMITH. Correct.

MR. LOCKHART. So this would be shortening.

MS. SMITH. The end of the workweek. Through Friday.

MR. LOCKHART. Dan, do you want to make it longer than two days?

MR. TARULLO. No. I just want to keep it where it is now.

MR. LOCKHART. Keep it where it is now. Okay.

MR. LACKER. Yes. I think it's easy to overestimate the problems caused for us by diverse views being expressed in public. I have a clear sense that over the last 10 years, the sensitivity of financial market prices to any one individual Committee member's statements, other than the Chairman of the Committee, has steadily declined, and I think that's because we all speak more often about our views. The answer to sensitivity to individual bits of information is sometimes more information. That is to say, the more we're all speaking, the less markets are moved by any one communication of ours.

I'd strongly support this press conference, and I think there are going to be some subtleties about it that are going to emerge in practice. I think we're going to have to resist the urge to wait to do things at just these quarterly meetings. I think when we want to do something, we're going to have to have the courage to go ahead and do it. I think noon the next day is the right balance. I think it's right to give clear airwaves to the Chairman, but I also think it wouldn't be right to impose too much of a burden on him to communicate for several days on behalf of other people's views. I think his articulating faithfully the range of views is fine, but this outlet of people being able to contact other Committee members relieves some of the pressure on him to be very faithful about everyone's views all the way around the table. So I support this.

MR. TARULLO. Janet, can I have a go at this again? I've seen the very interesting study of the actual impact on markets of utterances by different members of the FOMC, and needless to say, having seen that study, I'm not worried about the impact on markets of utterances by different members of the FOMC.

I guess what I am worried about, Jeff, in my view, at least—reinforced by conversations with members of the Congress, members of the media who have covered the Fed for a long time, and academics—is that the stature of and respect for the Committee as a whole has been adversely affected by a perception of not just good, solid policy disagreement within the confines of the meetings, but a sense that there's a bit of a free-for-all, and there's a bit of a competition for the airwaves. I would have thought that the preferable outcome would be self-restraint by everybody, but that's why I referred to game theory. I think there are a lot of incentives to go in the other direction, and once somebody starts talking, then other people have the same incentive.

In an ideal world, I think, you'd have a press conference by the Chairman, and then the dominant reaction of other members of the Committee would be, "Yeah, that was pretty fair, good," and that's it. Then very occasionally somebody feels, "I really think that he or she missed something pretty fundamental that I think is important to say." What I fear, though, is that the afternoon after the press conference will become more Babel-like, so that's the concern. It's not that people shouldn't express their views. They certainly should. I do think that the way in which we have evolved, with no one intending it to be this way, is that by so much, so frequently, and in so many media expressing variant and idiosyncratic views, there's been some damage to the institution as a whole. That's what I'm trying to get at.

MR. LACKER. I don't share the perception that the institution has been damaged, but this has been illuminating for me. I think one could anticipate the press calling all of us for

interviews for Thursday at 12:01. I think it's conceivable that some people will accept, and then something like that might emerge, and I think that's something that maybe we should talk about and deliberate about. I mean, I think the equilibrium we have now is that we don't race to the end. We wait for our regularly scheduled appointments with the public in order to say what we have to say, and that has some attraction, I think.

VICE CHAIRMAN DUDLEY. There is a compromise. By extending the blackout a little bit longer, through the end of Thursday, there's a quiet day. So the Chairman speaks, there's a quiet day, and then on Friday people can speak. Friday is not a great day to go out because you don't get that much coverage as you go into the weekend. So if people need to speak on Friday, they can. So that might be a way of balancing those two things.

I think it would be useful to have a little gap between the Chairman and other people because you don't want to get into "he said/she said" kind of stuff. So separating it by a full day might be helpful that way.

MS. YELLEN. It does sound helpful. I note there are a lot of conferences; often our Banks have conferences on Fridays, so it has been a problem for people that we need to make speeches on the Friday after an FOMC.

MR. LOCKHART. That would be a nice benefit.

MS. YELLEN. I think it would be very useful to get a sense of the Committee on when to end the blackout period after these two-day meetings. Betsy, do you want to weigh in on that?

MS. DUKE. I know we weren't going to talk about the one-day meetings, but because the one-day meetings happen a day earlier, and this Friday thing has come up before, if we were going to end it on Thursday after the two-day meetings, would we also want to end it on Thursday after the one-day meetings?

VICE CHAIRMAN DUDLEY. Why not?

MS. SMITH. I think so.

VICE CHAIRMAN DUDLEY. That would be nice.

MS. YELLEN. Dennis.

MR. LOCKHART. I go with Dan's approach here. I was very comfortable with two days after a meeting ending on Wednesday, which effectively means that you're not saying anything until the following Monday, in most cases. I am perfectly comfortable with that. I don't necessarily see a compelling need to get out very quickly, and I do think that it invites a lot of what we would consider to be more "short-termism" in the discussion. So I'm okay with the current policy.

MS. YELLEN. Other comments on this? Jim?

MR. BULLARD. I think it's a great idea, and I think we're catching up with other central banks on this dimension. So I think that's very good. I'm not sure I have strong views about the blackout. I think we behave strangely after the meeting because most organizations, once they have something to say, they would send everybody out to go say it, and we don't do that. We let others spin ours. We let financial markets spin what we have to say, and I don't think that that's a great thing to do. This press conference will help mitigate that. Also, just from scheduling, I like the Friday because a lot of times that's where the conflict is. But other than that, it won't make any difference to me.

MS. YELLEN. Charlie.

MR. EVANS. I agree with Jim in the sense that I think this is a great idea to have the press conferences. It is good to get the Chairman out front with the right message. If the blackout ended so that we could have a Friday conference, that would be great. If push comes to

shove, I guess I wouldn't be horribly opposed to keeping the blackout period the way it is right now. But I do think it would be of benefit; I don't think that the risk is that great.

MS. YELLEN. Let's see if we can get a consensus; let me try to get an overall sense of how people feel about the blackout period and when to end it. In a way, I think Bill has come up with a nice compromise between the two things. Let me put his proposal forward first, which is, the blackout period would run through Thursday. On Friday, people would be free to go out and give speeches, and that addresses the issue of conferences on Fridays. Hopefully, people would show self-restraint, though. I do hope this isn't going to become, "Oh, the Chairman got out there, so now we have to race to give interviews the moment the blackout ends." But let me try Bill's compromise approach: Blackout would go through Thursday. By a show of hands, how do people feel about that?

MR. FISHER. Close of business or midnight?

MR. LACKER. Those are different? [Laughter]

MR. ROSENGREN. What were going to be the formal choices that you have?

MS. YELLEN. I was thinking of these three choices: Thursday at noon is one choice; end of the day on Thursday—I guess, midnight—is the second choice; and current blackout time on Friday is the third choice. Starting with the one in the middle, because it got considerable support. [Show of hands] How about the shorter blackout period, through Thursday at noon? [Show of hands] And the longer blackout period, our current practice going all the way through Friday? [Show of hands] So it looks to me like, Bill's approach.

MS. DUKE. Richard, you didn't vote.

MR. FISHER. No, no. I'm a member of the subcommittee. I'm trying to not to interfere with the process. [Laughter] So, Tom, your argument is that we should end it at noon on Thursday?

MR. HOENIG. Well, my argument is that the original blackout was there because we didn't announce anything.

MR. FISHER. So we're shortening the blackout period. At least we got Friday out of this thing.

MR. HOENIG. That's a positive. [Laughter] It's not good enough, but it's a positive.

MS. YELLEN. Okay. So I guess I'm seeing considerable support for Vice Chairman Dudley's suggestion.

MR. WILLIAMS. Can I ask a clarifying question? Is this just about the two-day meetings?

MS. YELLEN. Yes, this is just about the two-day meetings. There's no change that we're proposing for the one-day meetings or beforehand, but that's something our Subcommittee could also take up and might come back with further proposals concerning the blackouts.

MR. FISHER. I thought the proposal was—again, being a member of the subcommittee I want to be careful and listen—that even for the one-day meetings we'd end it for Friday as well. Is that right?

MR. WILLIAMS. I think that's what I was asking.

MR. EVANS. I thought you started out the discussion saying we were only talking about the press conferences after the two-day meetings. And you weren't going to talk about anything else. Now, you may have indicated something that was sympathetic toward that, but—

MS. YELLEN. Okay. So I did start out by saying we're only talking about the blackout after two-day meetings. We have drifted into a discussion of why not shorten it after the one-day meetings, and the subcommittee really hasn't discussed that, but it would be useful to have a sense.

MR. PLOSSER. Just a quick reaction. I think it's kind of silly to have them different. It's going to be hard for people to understand and hard for markets to understand.

MR. KOCHERLAKOTA. It's going to be hard for us to keep track. [Laughter]

MR. PLOSSER. Much less us keeping track.

MS. YELLEN. Suppose we said, for all meetings the blackout period goes through Thursday midnight?

PARTICIPANTS. Yes. It's a good start.

MS. YELLEN. Yes?

PARTICIPANTS. Yes.

MR. LOCKHART. What was your question again?

MS. YELLEN. We just cut a day off the blackout period.

MR. LOCKHART. So it's the end of day Thursday.

MS. YELLEN. Right. For all meetings, whether there's a press conference or not. So Friday, now, we're proposing, is okay. Anybody have a—Bill, you have a look of discomfort.

MR. ENGLISH. Well, there is an annoying complication. Sometimes we push meetings back because there are meetings in Basel, for example, and people are traveling back, and so we have meetings on Wednesday—I think we have one coming up next year.

MR. LUECKE. That's right.

PARTICIPANT. Is that a one-day meeting or two-day?

MR. LUECKE. It's a one-day actually.

MR. ENGLISH. It's a one-day meeting on Wednesday. Push the blackout back to Friday?

PARTICIPANTS. No, no, no. Just leave it at Thursday.

MS. YELLEN. Okay. Fridays we're free.

CHAIRMAN BERNANKE. Casual Friday.

MS. SMITH. Can I mention something about that? I would not recommend that we tout the end of our blackout period one day sooner as a dramatic increase in transparency. It's really just a practice that you all have adopted over the years; it's not a hard rule. So you might get laughed at.

MR. LACKER. You mean, you might get laughed at.

MS. SMITH. I might get laughed at. [Laughter]

MS. YELLEN. Okay. Thank you.

CHAIRMAN BERNANKE. Thank you. If anyone has any questions or suggestions, please call me or Janet, and if necessary we can issue some kind of document and have a call or whatever we need to do. We'll be thinking about the format, but I've given you a general idea. The goal of it basically, of course, is to try to increase the understanding of what we're doing and, in particular, link it up to our longer-term approach. So I'm hopeful it will work well.

VICE CHAIRMAN DUDLEY. So we should assume the April meeting starts at noon?

CHAIRMAN BERNANKE. So that was the plan. April meeting, and we'll keep you posted. One implication is that if you have changes to projections, they have to be done by the end of the first day instead of the end of the second day. All right. If there's nothing else on this topic, I want to remind you that the next meeting is April 26 and 27.

MR. LACKER. At noon.

CHAIRMAN BERNANKE. At dawn. [Laughter] The meeting is adjourned. Thank you. Have a good trip home.

END OF MEETING