

**Meeting of the Federal Open Market Committee on  
December 11, 2007**

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., on Tuesday, December 11, 2007, at 8:00 a.m. Those present were the following:

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Mr. Evans  
Mr. Hoenig  
Mr. Kohn  
Mr. Kroszner  
Mr. Mishkin  
Mr. Poole  
Mr. Rosengren  
Mr. Warsh

Ms. Cumming, Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee

Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Ms. Smith, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Baxter, Deputy General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Clouse, Connors, Fuhrer, Kamin, Rasche, Sellon, Slifman, Sullivan, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. English, Senior Associate Director, Division of Monetary Affairs, Board of Governors

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

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Meyer, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors

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

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

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

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

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

Mr. Altig, Ms. Perelmuter, Messrs. Rolnick, Weinberg, and Williams, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, Minneapolis, Richmond, and San Francisco, respectively

Messrs. Bryan and Yi, Vice Presidents, Federal Reserve Banks of Cleveland and Philadelphia, respectively

Mr. McCarthy, Research Officer, Federal Reserve Bank of New York

**Transcript of the Federal Open Market Committee Meeting of  
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CHAIRMAN BERNANKE. Good early morning. [Laughter] I would like to start by thanking the Committee for the very useful discussion we had last week, although I must say that videoconference is not the most intimate format. People raised a number of important reservations about the TAF, including the fact that capital, perhaps more than liquidity, is the issue now; issues about the size of it; and concern about stigma. I think that those points are well taken and that we need to be modest in our expectations about at least the initial effect of this facility. However, as I indicated last week, I think that it will perhaps provide a platform for us to create a more flexible tool that will allow us to use our discount window facilities in a more effective way as we go forward. In the near term, it has also provided a good vehicle for us to cooperate with other central banks, and I would like to update you on that now.

First, the Board did approve the TAF on Friday by notation vote, as we expected. Second, we have been in communication with the whole G-10 about these matters and have widespread support from our colleagues for this action. In particular, I believe that you have a draft press release that will be very similar to what will be released tomorrow morning. What time is it? It's at 8:30 a.m. now?

MR. KOHN. 9:00 a.m.

CHAIRMAN BERNANKE. Tomorrow morning at 9:00. It will be a joint release of five central banks. The press release will have a common first paragraph, as you see in front of you, and then each central bank will describe its own actions in more detail, followed by web links to the other central banks. In particular, the European Central Bank will take the \$20 billion in swaps that we approved last week and will do two essentially noncompetitive auctions. That is,

they will allocate \$20 billion in two tranches to European banks needing dollars at the price that clears the U.S. TAF, so they may have to ration or otherwise allocate. That is their problem.

The Swiss National Bank will also do a \$4 billion one-time auction. Let's see, they are going to do an actual auction.

MR. KOHN. Are they? I think with a reservation price.

VICE CHAIRMAN GEITHNER. With a reservation price is our understanding.

CHAIRMAN BERNANKE. Okay. At our stop-out rate?

MR. SHEETS. The minimum bid will be one-month OIS.

CHAIRMAN BERNANKE. Okay. So they have the same auction plan that we have, essentially. In addition, we are being joined by the British, who are doing two auctions of £10 billion each before year-end. These are sterling auctions, not dollar auctions, but they are in fact of the same actual size as ours—an indication of the appreciation of the pound. Finally, the Canadians were already planning to do some auctions before the end of the year, and they will simply join us in announcing those at the same time. In addition, the Japanese and the Swedes, although not planning anything in the near term, will issue statements supporting our actions and affirming their willingness to support liquidity as necessary. So I am hopeful. Again, I think our expectations should be modest. This is not a one-shot deal. We will continue to try to address these problems, but I am hopeful that the international aspect of this will also be at least somewhat reassuring to markets. There will be, I think, a bit of disappointment today that we don't cut the discount rate spread; but by tomorrow morning, I hope that will be resolved one way or another.

A few people have asked about informing their boards. I have no objection to your informing your board if you wish in advance of the announcement—so long, of course, as it is

with the usual confidentiality rules. What I might suggest to you to consider is that perhaps a compromise between doing nothing and informing your whole board might be to give a call to your chairman sometime today and just give a heads-up, if you choose. I am just indicating that we have no objection, to your doing that.

There is one piece of business remaining associated with this, which is that we have to approve the \$4 billion swap request from the Swiss National Bank. What I would propose to do is allow Bill to begin his report on Desk operations. Subsequent to that, we can take questions, either on the financial conditions that Bill describes, on any of these aspects, and then I would like, along with the ratification of operations, to ask you at that time also for a vote on the swap. So if there is no question or comment at this point, I will turn to Bill.

MR. DUDLEY.<sup>1</sup> Thank you, Mr. Chairman. I will be referring to the exhibits that you should have in front of you. Over the past few months, the outlook for residential housing has continued to darken. Rising inventories and tightening credit standards have led to outright declines in home prices in many major housing markets. The deterioration in the subprime mortgage space continues. As shown in exhibit 1, delinquency and foreclosure rates for subprime mortgages continue to rise very quickly; and as before, the degree and the pace of deterioration are much worse for more recent vintages (see exhibit 2). But most important, the problems in residential mortgages can no longer be thought of as a subprime or even an alt-A mortgage problem. As shown in exhibit 3, delinquency and foreclosure rates on prime mortgages have moved up sharply in recent months.

The ongoing deterioration in the housing market has had a number of important implications. The first important development is that highly rated collateralized debt obligation (CDO) tranches—including so-called super-senior AAA-rated tranches—are now vulnerable. That is because these tranches typically are backstopped, in part, by lower-rated subprime ABS tranches and other mortgage-related securities product. For highly rated CDO tranches to be protected against loss, it is important that the average loss rate on the underlying collateral stays relatively low and that the correlation in loss performance among the different assets that underpin the CDO stays low. Unfortunately, for many of the CDOs issued in 2006 and 2007, these conditions no longer apply. As housing has deteriorated, not only have expected loss rates climbed, but the correlation among the assets within CDOs has also moved sharply higher. This has occurred because a growing proportion of BBB-rated and A-rated ABS tranches now appear likely to suffer losses. At a 10 percent average

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<sup>1</sup> Materials used by Mr. Dudley are appended to this transcript (appendix 1).

loss rate on subprime ARMs, many BBB- and A-rated tranches are likely to survive. There is a dispersion of loss rates—say between 5 percent and 15 percent—that helps keep correlations low. But at a 15 percent loss rate, the same degree of dispersion protects many fewer tranches than before. Instead, most of these tranches will become impaired. As this occurs, the correlation rate will climb sharply. The net result is that CDO tranches that were thought to be safe become highly vulnerable to losses.

Exhibits 4 and 5 illustrate the sensitivity of CDO performance to the mortgage loan-loss rate. These exhibits summarize a study by UBS of a large number of CDOs brought to market in 2006 and 2007. Exhibit 4 shows how sensitive the performance of the CDO market is to changes in underlying mortgage loss rates. The base case scenario assumes a relatively favorable loss experience. For example, in the base case, losses for subprime mortgages are assumed to be about 11 percent for both 2006 and 2007 vintages. In this case, total loss estimates for mezzanine CDOs are around 20 percent and less than 5 percent for high-grade CDOs. In the base case, the losses for the super-senior tranches are trivial. But when loss estimates increase 50 percent above the base case, loss estimates on the CDO tranches climb much more sharply. For example, the average losses for the mezzanine CDOs triple, rising six times faster than the rise in underlying loan losses, and expected losses on the super-senior mezzanine CDO tranches soar. In this case, they are anticipated to lose about one-half of their value. Exhibit 5 focuses on how a relatively modest change in the loss rate on the underlying mortgages leads to a sharp shift in the distribution of losses. In the base case, the super-senior tranches of most CDOs are expected to suffer no losses. However, at the higher loss rate on the underlying mortgages, about half the super-senior tranches are expected to lose more than half their value.

The CDO market is now fully implicated in the housing crisis. The rating agencies are now downgrading many CDOs, and the magnitude of the downgrades is often quite large. As a result, the value of many CDOs has fallen sharply. This has led to (1) large write-downs at some major financial institutions and (2) questions about the financial health of the financial guarantors that ensure some of the super-senior CDO tranches and that have other exposure to the residential mortgage market. Exhibit 6 illustrates the large movements in two of the major financial guarantors' share prices and credit default swaps over the last few months. Moody's recently indicated that MBIA—generally perceived as one of the stronger players—is “somewhat likely” to need to raise more capital to avoid a credit-rating downgrade. MBIA announced yesterday that they are raising \$1 billion in equity capital from Warburg Pincus.

The total outstanding volume of asset-backed commercial paper has begun to contract more rapidly again (see exhibit 7). This contraction appears relatively broad-based—it is not just an SIV story. The Master Liquidity Enhancement Conduit (MLEC) continues to move slowly forward, with the syndication process having just started. But the MLEC is not likely to be very large. SIV assets have already shrunk sharply, and some banks have already taken SIV assets back on their own balance

sheets. The difficulties of the SIVs have affected some money market investment funds—with the State of Florida's Local Government Investment Pool the most notable casualty in this regard. Fortunately, most money market funds that have SIV exposure are backed by strong parents that have been willing to lend support, at least up till now.

The second key development—the deterioration in the performance of the broader mortgage market—has had its own set of effects on the financial sector. First, it has led to significant loan-loss provision charges and mark-to-market losses for the two major housing GSEs—Fannie Mae and Freddie Mac. The result has been a sharp decline in their share prices and a substantial rise in the cost of credit default swaps for these institutions (see exhibit 8). Second, the mortgage insurers have also been implicated, with even more substantial share price declines and increases in the cost of credit default protection (see exhibit 9). In addition, the big thrift institutions remain under pressure. Yesterday, for example, Washington Mutual announced large loan-loss provisions and other write-downs and slashed its common stock dividend. For commercial banks, the consequence of CDO write-downs and of rising mortgage and other loan losses has been even more pressure on capital ratios and on balance sheets. Also, corporate debt spreads have increased markedly over the past few months (see exhibit 10). The rise in high-yield debt spreads is important for banks that still have significant leveraged-loan exposure that they hope to distribute to the capital markets. The widening in spreads suggests a risk of further mark-to-market charges for banks for these exposures.

So is there any good news in any of this? I would emphasize four aspects that might provide some modest reassurance. First, market participants know a lot more now than they did before. Thus, fear is diminishing, which implies less risk of a crisis developing from this source. Second, although there remain considerable uncertainties on many fronts—such as the magnitude of mortgage losses, the degree of further tightening of credit availability, and the fate of some thrifts and mortgage and financial guarantors, I believe we may have finally defined the broad dimensions of the crisis. Most of those who are likely to be implicated may already have been identified, with the CDO debacle the latest installment that has widened the circle of participants. The issue now seems to be shifting toward severity from dimension. Third, the market is resolving some aspects of the crisis on its own. For example, the level of SIV assets has shrunk sharply since August. Fourth, several major financial institutions, in addition to MBIA and Washington Mutual, have raised capital from disparate sources. Citigroup and UBS are raising funds from sovereign wealth funds. E\*Trade raised funds from a major hedge fund. Fannie Mae and Freddie Mac have raised capital through preferred stock issues. The willingness of opportunistic investors to make such commitments may limit the balance sheet squeeze somewhat and put a floor—albeit a low one—under asset prices.

Let me turn next to market expectations about the path of short-term interest rates at this meeting and beyond. Exhibit 11 shows expectations for the current meeting, calculated from options prices on federal funds rate futures. As can be seen, the

probability of a 25 basis point cut has climbed to about 70 percent, and the probability of no change in the target federal funds rate has fallen virtually to zero. As shown in exhibits 12 and 13, expectations for subsequent rate cuts have increased considerably since the October meeting, whether one looks at the yields implied from federal funds futures contracts or from Eurodollar futures contracts. Looking out to the end of 2008, rate expectations have fallen more than 50 basis points since the October FOMC meeting. The Eurodollar futures rate for December 2008 implies more than 100 basis points of additional easing. Our survey of primary dealers also shows a sharp shift downward in rate expectations since the October FOMC meeting. As shown by comparing exhibit 14 with exhibit 15, the average of the dealer modal forecasts for the federal funds rate target in the first quarter—the green circles in the exhibits—fell about 30 basis points, and the average of the dealer modal forecasts does not differ meaningfully from market expectations at that time period.

However, longer term, the primary dealers' forecasts seem to anticipate less easing than market participants. But this may reflect more the downward skew to rate expectations that pulls the mean below the mode rather than a more fundamental difference in expectations. As has been the case for several months, there is a very wide dispersion of forecasts one year ahead, with the primary dealers' modal forecasts now ranging from 2.5 percent to 4.75 percent. Despite an expectation of more-aggressive easing, inflation expectations appear to be well anchored. Exhibit 16 shows two measures that I discussed at the October FOMC meeting—the market-based Barclays measure of five-year, five-year forward inflation versus the Board staff measure. As can be seen, although the gap between these two measures has remained much wider than earlier in the year—presumably reflecting, in part, a climb in the liquidity premium for on-the-run nominal Treasuries—both measures have moved down a bit since the October FOMC meeting.

Finally, a very brief discussion of the Desk's open market operations is warranted. As seen in exhibit 17, which shows the cumulative effective federal funds rate since the last meeting, we have managed to keep the federal funds rate close to the target on average. But it hasn't been easy. As you can see, the rate did trade a bit soft to the target early in the intermeeting period. Also, we continue to see upward pressure on the federal funds rate early in the day—reflecting a strong bid by European banks—and much greater intraday and day-to-day volatility than before August.

There were no foreign operations during this period. I request a vote to ratify the operations conducted by the System Open Market Account since the October 30-31 FOMC meeting. I also request a vote to ratify the swap agreement with the Swiss National Bank that Chairman Bernanke discussed earlier. Of course, I am very happy to take questions.

CHAIRMAN BERNANKE. Thank you. Are there questions for Bill on financial conditions or for Bill or me on the TAF proposal? President Poole.



MR. POOLE. Thank you, Mr. Chairman. I have an observation, and that is, Bill, that most of your presentation has to do with spreads rather than with the absolute level of rates. Although it is true that spreads remain wide, the absolute level of the high-quality rates in general has come down, I believe. Prime mortgage rates are down, and it seems to me that if we look only at spreads then, of course, our actions to reduce the federal funds rate target may not show up for quite some time. In fact, I think most people have the sense that spreads had gotten too narrow and they may end up being elevated for a long time even as a “permanent” matter. So I think it is very important to look at the level of rates as well as the spreads, and I insert the comment—and I notice you’re nodding your head “yes”—that the rates on high-quality paper have in general come down. The rates on riskier paper are perhaps higher than they were, let’s say, in July.

MR. DUDLEY. Yes, I think that is correct. If you look at chart 10, which shows corporate credit spreads, you have a widening of about 50 basis points in investment-grade corporate spreads at a time that long-term—you know, ten-year—Treasury note yields have come down by I think a little larger magnitude. In contrast, in the high-yield debt market, you have a widening of spreads of 200 basis points just in the last month and a half or two months, which is much more dramatic than any decline that we have seen in Treasury rates.

CHAIRMAN BERNANKE. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I asked the staff to put together a table—the table III-T-1 that we get in the Greenbook—and compare rates with August 6. It turns out that all the rates are about the same as they were on August 6 for the bond yields, and equity prices are essentially unchanged, maybe down or up—actually up—just a tick. So I would say that the

75 basis points of easing we did and the additional 100 that the market has priced in since August 6 have had no effect on the cost of long-term credit to corporations.

CHAIRMAN BERNANKE. I think it is probably worth observing that the spreads probably also are correlated with nonprice terms. So it may not be an exactly neutral change. President Fisher.

MR. FISHER. Bill, we talked a bit about this on the phone yesterday, but on the four relatively optimistic points that you mentioned, the fourth point, which is what I call the substitutability of capital, we are seeing new sources. One of them is measurable, which is the GIC in Singapore. But do we have any sense of the dimension that is available for substitution, and is there a way to get a better sense of measurement? I just want to preface this by saying that we went through the petrodollar issue in 1974. Some of us were very involved in that exercise. It is a much more sophisticated business right now, and we have much more sophisticated investors. What we don't know—or I don't know and I would be curious whether we know at the New York Desk—is how big this money is and how much is available to be tapped.

MR. DUDLEY. Well, I guess I would say two things. I think you are absolutely right that the sovereign wealth funds are of significant size and are growing rapidly. But I think that you really have to distinguish between the equity side and the debt side of things. The commitments that you are seeing from the sovereign wealth funds seem to be equity investments, and they are equity investments that have occurred only after share prices fell very sharply. If you look at debt spreads in the United States, debt spreads in Europe, and debt spreads throughout the world, they have widened. So it doesn't look as though the sovereign wealth fund money is providing much help for that sector. It would be surprising if it were big enough, given the constraints on bank balance sheets globally, that they could come in and fill the gaps. So I

think, on the equity side, the sovereign wealth funds are pretty important. They are providing some floor on equity prices, but only after the equity prices of some of these financial firms have gone down very significantly in value.

MR. FISHER. Nonetheless, they can restore tier 1 capital, as we saw in the case of UBS. I mean, that is how markets work.

MR. DUDLEY. Yes. It is a good development that we are actually finally seeing banks raise capital. I don't think you were seeing that until last month. I would say that there was stigma associated with raising capital, and then things got progressively worse, so banks were just forced to raise capital despite the stigma associated with it.

MR. FISHER. Well, I wanted to thank you for at least raising four rays of dim sunlight.

MR. DUDLEY. We try for balance.

CHAIRMAN BERNANKE. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. Bill, the trouble with the mortgage insurers has been a development since our last meeting, and I am curious—Do they have the capability for raising capital? Will raising capital correct or help them get their ratings back to AAA, or is it more complicated than that? I have read some concerns about the effect, for example, on municipal markets if the guarantors cannot in fact maintain their ratings. So do you have some insight into their ability to raise capital and correct the potential for a downgrade?

MR. DUDLEY. The risk to the municipal market is really through the financial guarantors, not so much the mortgage insurers. The fact that MBIA was able to raise \$1 billion of equity capital yesterday for, I think, about one-seventh of their book value—so it is a fairly large capital commitment relative to the size of the company—is an important development. You saw that MBIA stock yesterday rose more than 10 percent because it basically was a

confirmation, at least in the minds of some people in the market, that MBIA was a viable business and that someone was willing to put \$1 billion of new capital in. I think that was reassuring to the market. Generally, the people I have talked with suggest that the barriers to entry into those businesses are pretty high. The second thing that is happening is, obviously, as you see this distress, their pricing power on new business is actually improving. That would suggest that there is a reasonable chance that these firms will be recapitalized, but it depends on how far down the path they are toward serious problems.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Just a quick comment. I have talked to one of the large mortgage insurance companies in some detail, and their view is that their pricing power actually is improving—that their own ability to work their way out of this thing is getting better all the time right now. Even though they are taking some very large hits in the near term, their outlook actually has improved in recent months, partly because of this. This was just to reinforce that point.

CHAIRMAN BERNANKE. Other questions for Bill? If not, we need to vote to ratify domestic operations.

MR. KOHN. So move.

CHAIRMAN BERNANKE. Without objection. Okay. We also need a vote on the Swiss request for a currency swap.

MR. KOHN. So move.

CHAIRMAN BERNANKE. Any commentary? President Poole?

MR. POOLE. I vote against the swap for the same reason that I did before, which I would like to amplify, if I may, just for a moment.

CHAIRMAN BERNANKE. Why don't you make your comment, and then we will take a roll call vote.

MR. POOLE. Okay. As I said in our conference call, foreign central banks have ample amounts of reserves. The swap is, therefore, in my view not necessary. I would like to make one other observation. In the past, the swaps have been most often used in conjunction with operations to intervene in the foreign exchange markets. I worry that we may get a reaction in the market, given the concerns in Europe about the value of the dollar, that would say that this is a precursor to some sort of coordinated intervention in the foreign exchange market. I would be very opposed to the intervention, I think it would upset things quite substantially, and I would worry that the market concerns that there might be intervention coming would upset the situation on this announcement. So those are my concerns and why I vote against.

CHAIRMAN BERNANKE. Thank you. We will, of course, announce a swap in the context of our plan to address money market issues. With respect to the issue of their reserves, I think there are two reasons for having the swap. One is that for technical reasons it is easier for them to segregate their foreign exchange reserves from the money they would use in this auction. They felt it was bureaucratically easier for them to do it this way. Second, this obviously gives us—which is very important for our monetary control—sort of a clear marker in terms of what the size of this operation will be, and so on. But your points are well taken. Any other comments? If not, Debbie, could you please read the resolution?

MS. DANKER. “The Federal Open Market Committee directs the Federal Reserve Bank of New York to establish and maintain a reciprocal currency arrangement for the System Open Market Account with the Swiss National Bank in an amount not to exceed \$4 billion. The Committee authorizes associated draws on the arrangement up to the full amount of \$4 billion.

The swap arrangement shall be for a period of up to 180 days, unless extended by the Committee.”

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
President Evans	Yes
President Hoenig	Yes
Governor Kohn	Yes
Governor Kroszner	Yes
Governor Mishkin	Yes
President Poole	No
President Rosengren	Yes
Governor Warsh	Yes

CHAIRMAN BERNANKE. All right. Thank you. Let us turn now to the economic situation and Dave Stockton.

MR. STOCKTON. Thank you, Mr. Chairman. We had a great deal to contend with over the intermeeting period, and the forecast has changed in some important ways. Nevertheless, the basic story underlying our projection remains largely unchanged. The fallout from the slump in the housing sector, the ongoing turbulence in financial markets, and elevated energy prices result in subpar growth over the next several quarters. With some further easing of monetary policy, a leveling-off of oil prices, and a gradual improvement of financial conditions, growth picks back up toward potential in 2009. The gap in resource utilization that opens up over the next several quarters, in combination with the anticipated flattening-out of energy prices, puts total and core inflation on a mild downtrend over the longer haul.

Overall, our forecast could admittedly be read as still painting a pretty benign picture: Despite all the financial turmoil, the economy avoids recession and, even with steeply higher prices for food and energy and a lower exchange value of the dollar, we achieve some modest edging-off of inflation. So I tried not to take it personally when I received a notice the other day that the Board had approved more-frequent drug-testing for certain members of the senior staff, myself included. [Laughter] I can assure you, however, that the staff is not going to fall back on the increasingly popular celebrity excuse that we were under the influence of mind-altering chemicals and thus should not be held responsible for this forecast. No, we came up with this projection unimpaired and on nothing stronger than many late nights of diet Pepsi and vending-machine Twinkies.

While our basic story hasn't changed much, the events of the past six weeks have resulted in a considerable darkening of our outlook for activity over the next year. In particular, the incoming data have been weaker than expected, the projected path of household net worth has been revised down owing to lower prices for both equities

and houses, oil prices average about \$7 per barrel higher than in our previous forecast, and the brief improvement in financial conditions that we experienced in September and October has been reversed in recent weeks. As a consequence, we now project that real GDP will be about flat in the current quarter after having increased at an annual rate of 5 percent in the third quarter. Although the sharp swing in activity from the third to the fourth quarters is exaggerated by some wide fluctuations in inventory investment, we are reading the incoming data as suggesting that there has been a greater downshift in the underlying pace of growth than we had previously anticipated. Furthermore, we expect activity to remain sluggish next year, growing 1¼ percent, nearly ½ percentage point less than in our October projection. In 2009, real GDP is projected to grow at a 2.1 percent pace, a touch below our previous forecast.

Most of the disappointing news that we have received over the past six weeks has centered on the household sector, most especially on residential construction. Single-family housing starts came in a bit below expectations, and permits plunged, suggesting some further intensification of the decline in construction activity in the months immediately ahead. Moreover, substantial downward revisions to estimates of new home sales for earlier months indicate that housing demand has been weaker than we previously thought. Meanwhile, conditions in mortgage markets have deteriorated further and appear likely to remain impaired longer than we had projected in October. Nonprime markets remain moribund, spreads on jumbo mortgages have widened further, and spreads on conforming mortgages to Treasuries have increased. These developments along with the weaker incoming data on sales and starts led us to mark down our housing forecast once again. We now expect that sales and starts will post a further drop of nearly 10 percent by early next year. Moreover, we have delayed our projected recovery in starts until 2009. As a consequence, the contraction in residential investment is now expected to subtract over ½ percentage point from the growth of real GDP next year, about ¼ percentage point more than in our October projection.

In addition to these softer readings on housing activity, the incoming data on consumer spending also have surprised us to the downside. Real outlays are now estimated to have been nearly flat between August and October, rather than increasing modestly as had earlier appeared to be the case. That subdued pace seems consistent with the slump in consumer sentiment that has followed in the wake of the increased financial turbulence. We now project that real PCE increased at a 1¼ percent pace in the current quarter, 1 percentage point less than in the October Greenbook. I don't want to overstate the strength of our case that a noticeable slowing in consumer spending is under way. Light motor vehicle sales ran at a 16.2 million unit pace in November, an observation that creates a bit of tension with the survey reports of bummed-out consumers. Moreover, it wouldn't take much more than a few modest upward revisions to earlier months or a pop in spending in December to undermine this part of our story. That said, the picture doesn't seem likely to us to brighten much soon. The recent jump in oil prices, coupled with a restoration of currently narrow gasoline margins, points to steep increases in retail

energy prices that will take a bite out of the purchasing power of household incomes and further restrain overall consumer spending in coming months. Furthermore, with the lower level of the stock market and a downward revision to our house-price forecast, household net worth is expected to exert more of a drag on consumer spending over the next two years than in our previous forecast. While we don't expect a dramatic shift, we are anticipating that households will face tighter standards and more-expensive terms for consumer credit. All told, we are projecting real PCE to increase 1½ percent in 2008, about ¼ percentage point less than in our October projection.

In contrast to the almost uniformly weaker-than-expected data on the household sector, the information that we have received on business spending has been more mixed. Investment in high-tech equipment has been well below our expectations, especially for communications equipment. That observation squares with some reports we have heard that orders for high-tech gear from financial institutions have fallen off. Other equipment spending has come in close to our expectations, with the recent data on orders and shipments consistent with our projection for some modest slowing in capital spending. The data also have been mixed for nonresidential structures. As I noted at the last meeting, the GDP data for the third quarter pointed to stronger drilling activity than we had earlier anticipated, and we have revised up our projection for this category in response to both the incoming data and the higher projected path for energy prices. For nonresidential buildings, the October data for construction put in place were a bit below our expectations, and we have lowered our near-term projection of activity in this sector. Beyond the near term, we have reduced our forecast for both equipment spending and nonresidential investment. Most of that revision reflects an expected endogenous response of investment to the slower growth of final sales and business output in this projection. But we also have made some small allowance for what we expect to be less favorable financing conditions and greater uncertainty over the next year.

Taken as a whole, the spending data have clearly fallen short of our expectations. It might appear that, like the spending data, last week's labor market report was also a downside surprise for us; after all, we noted in the Greenbook that we had penciled in an increase of 100,000 for private payrolls in November. However, we did that only grudgingly after seeing the ADP survey last Wednesday morning, and basically we did not allow that change to alter any other important aspect of our forecast. In fact, the payroll employment figures are slightly stronger than we expected at the time of the October Greenbook. Indeed, I still see the generally firm conditions in labor markets as suggesting some upside risk to our view that the economy is in the process of slowing sharply.

Let me now turn to the inflation forecast. Total PCE prices are projected to increase at an annual rate of 3½ percent in the current quarter, about ¾ percentage point above our previous forecast. Most of that revision reflects higher retail energy prices. But we have also raised our projection of core PCE prices for the third and fourth quarters by ¼ percentage point. That adjustment resulted from the upward



revisions made by the BEA to nonmarket prices in earlier months. As you know, we had been consistently surprised by the mild increases in nonmarket prices that had been reported since the spring. As a concession to those persistent errors, a couple of forecast rounds ago, we pushed off the reacceleration of those prices into 2008. Well, we should have stuck with our earlier story because the revised data now show that those prices picked back up in late summer and early fall.

Our slight upward revision to core PCE prices in 2008, from 1.9 to 2.0 percent, reflects the indirect effects of the higher oil prices in this projection. We continue to believe that the pass-through of energy prices is small, but not zero. The other major influences on our price projection have remained relatively tame. Although the exchange value of the dollar has fallen a bit, global prices for non-oil commodities have revised down as well, leaving the forecast for core non-oil import prices roughly unchanged. Increases in labor compensation remain subdued. And taken as a whole, readings on inflation expectations have not changed much. The Michigan survey measures of inflation expectations are up some, the Survey of Professional Forecasters was flat, and inflation compensation as inferred from TIPS has edged down slightly. With some slack emerging in labor and product markets in the second half of next year and with energy and import prices projected to decelerate, we are forecasting a slight drop in core price inflation from its projected pace of 2 percent this year and next to 1.9 percent in 2009.

In contemplating our forecast, you might be concerned that our relatively benign muddle-through scenario is increasingly looking like the average of two considerably less benign outcomes—one in which the economy proves considerably more resilient, growth bounces back more quickly, and inflation picks up by more than we are projecting and another in which we drop below stall speed and the economy experiences outright recession. While I would readily acknowledge those risks, I still see something like our forecast as the more plausible outcome at this point. At the September meeting, I quoted from the Greenbook of March 1999, in which we had raised the white flag of surrender on our story that the financial turbulence of the autumn of 1998 would significantly restrain the growth of the economy. We could be making that mistake again, but it seems less likely to me now. In particular, one important feature of the episode of the late 1990s was that we were almost immediately fighting the incoming data, much of which came in well above our expectations over the final months of 1998 and early 1999. By contrast, as I have noted today, the recent data seem to be lining up comfortably with our projection of slower growth ahead. I also noted in September the possibility that we could be facing a situation similar to the fall of 2000, when we were forecasting a period of muddling through but were, in fact, on the brink of a mild recession. Again, this possibility certainly can't be ruled out. But here, as well, there are some noteworthy differences from that earlier episode. In particular, through the fall of 2000, we were receiving increasingly grim stories, especially from manufacturers, about the dismal state of order books and a sharp shift in business psychology. At the time, we didn't have the conviction to embrace those anecdotes given the strength of the official data. I'll be interested to hear your reports today, but my sense is that the anecdotes from

businesses, while mixed, are not sharply at variance with the data at present. Both seem to be pointing to slower growth but not to a serious retrenchment in activity. For these reasons, we are inclined to stick with our muddle-through story for now. Nathan will continue our presentation.

MR. SHEETS. Our reading of the recent data suggests that economic activity abroad decelerated toward the end of the third quarter and has remained on a decelerating path thereafter. In the euro area, the United Kingdom, and Canada, this softening of activity appears to reflect—at least in part—increasing drag from the ongoing financial turmoil. Notably, in the euro area, business and consumer confidence have weakened some in recent months, PMIs for both the services and manufacturing sectors have declined, and recent readings on retail sales and industrial production have softened. In the United Kingdom, indicators of sentiment and retail sales also have slipped of late, and a slowdown in the housing sector is now under way—with declines in net mortgage lending, mortgage approvals, and major indexes of house prices. In response, the Bank of England late last week cut its key policy rate 25 basis points, to 5½ percent. The Bank of Canada also lowered its policy rate a notch last week, citing concerns about financial market turmoil.

In assessing the impact of the financial turbulence, we continue to see little evidence that the emerging-market economies are being significantly affected. Over the past month or so, debt spreads for many of these economies have risen, and their equity markets have given back some ground, but these moves are relatively mild when viewed from a longer-term perspective. All told, foreign growth is projected to step down from an average rate of nearly 4½ percent during the first three quarters of this year to below 3 percent in the current quarter and early next year. In addition to headwinds from the financial turmoil, this slowing reflects policy actions in some countries (particularly China) to rein in above-trend growth, as well as the softer pace of activity in the United States. Thereafter, we see foreign growth rising back to a rate of 3¼ percent. This outlook is weaker over the next few quarters than in our October projection, in line with the lower U.S. forecast. In addition, given the renewed market turbulence, we now see the drag from financial developments as likely to be larger and more protracted than we had previously assumed. We continue to believe that these effects will be felt mainly in the advanced economies, but an important downside risk to our forecast is the possibility that the emerging-market economies may be more affected than we now expect. On Friday, we received revised Japanese GDP data for the third quarter. The latest estimate cuts growth in the quarter to 1.5 percent at an annual rate, down 1 percentage point from the initial reading. Notably, this growth can be attributed entirely to net exports, as domestic demand contracted for the second consecutive quarter. Residential investment plunged in the third quarter, as new building regulations temporarily weighed on spending. Our forecast calls for domestic demand to bounce back quickly, but downside risks are increasingly evident; for example, the profitability of small and medium-sized companies has recently deteriorated, labor market conditions seem to be softening, and wages continue to contract.

The spot price of West Texas intermediate approached \$100 per barrel in late November, but mounting concerns about the near-term outlook for global activity have since pushed the price back below \$90 per barrel. At that level, spot WTI is down a few dollars per barrel since the last FOMC meeting. Continued concerns about the longer-term supply-demand balance, however, have kept the far-futures price at its late-November level, near \$87 per barrel—up about \$7 since the last FOMC meeting. Nonfuel commodity prices fell sharply in the third quarter and have continued on a downward trajectory. The prices of copper and nickel have plunged, driven by concerns that rising inventories may signal a softening of global demand for these commodities. The price of zinc has fallen as well. Notably, however, the prices of food commodities, including wheat, corn, and soybeans, have continued to rise.

This run-up in food prices, coupled with high oil prices, has stoked inflation in a number of countries. For example, in the euro area, twelve-month headline inflation has jumped from 1.7 percent in August to 3 percent in November, led by food and energy prices, thus prompting the ECB to leave policy on hold at its meeting last week. Going forward, this rise in inflation may continue to limit the ECB's willingness to ease policy, as fallout from the financial turmoil weighs on activity. In the United Kingdom, however, a recent rebound in inflation to slightly above the Bank of England's 2 percent target—driven in part by rising food prices—did not deter last week's policy move. Indeed, in cutting rates, the BoE noted that "higher energy and food prices are expected to keep inflation above the target in the short term." In China, food price inflation is running at more than 15 percent and has pushed overall inflation to 6.9 percent in November. The pace of inflation has elicited a range of policy responses from the authorities, including a move over the weekend to further increase reserve requirements. Our forecast sees global food and oil prices soon leveling off in line with quotes from futures markets, and this would contribute to a welcome moderation of inflationary pressures in a number of countries.

Since the last FOMC meeting, the dollar has strengthened on balance, rising 1 percent on average against the major currencies and ½ percent in broad nominal terms. Notwithstanding this reprieve from dollar depreciation, we continue to see the current account deficit—which still exceeds 5 percent of GDP—as a key factor that is likely to weigh on the exchange rate going forward. Thus our forecast incorporates some modest further real depreciation of the dollar. Notably, this depreciation comes entirely against our emerging-market trading partners, and we have slightly raised our projections for the pace at which the renminbi and several other emerging Asian currencies appreciate against the dollar.

I conclude with a few words about the U.S. external sector. We expect that export growth, following its red-hot 19 percent performance in the third quarter, will moderate to a still-strong pace of around 7 percent in the current quarter and through the next two years, as exports are supported by past declines in the dollar and still-solid foreign activity. Import growth in the current quarter will be sustained at its

moderate third-quarter rate by a seasonal rebound in oil imports, but import growth is expected to fall off during the first half of next year, in line with the softer pace of U.S. activity. Thereafter, imports are projected to gradually accelerate, as growth in the United States firms. All told, we see net exports making positive arithmetic contributions to growth of 0.1 percentage point in the fourth quarter of this year, 0.5 percentage point in 2008, and a little over 0.1 percentage point in 2009. That concludes our prepared remarks, and we are happy to take questions.

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

MR. FISHER. Actually, Mr. Chairman, I have a statement disguised as a question. [Laughter] I am glad on the international side that we raised the issue of food price inflation, not because it is on the cover of *The Economist* but because we discussed it at our last meeting. What is curious to me, David, is that there is only one line on page 13 of the Greenbook. It says, “At the same time, agricultural producers are expected to step up output of farm products, and that should help bring consumer food price inflation more in line with core inflation.” My statement is that, given our communication exercise, we are drawing more attention to headline PCE. My question is, Do I understand it correctly that the food weight in the PCE is twice that of energy and in the CPI is 1½ times that of energy? Therefore, why are we not talking about food price inflation as it affects headline inflation numbers, and why do we spend so much time on energy relative to food? That is my question. Or are we just not worried about food? The second question—by the way, on the international side, as well as the domestic side—is, What is the basis for our optimism that food prices will come down against the background of the demand that you have described on the international side? Thank you.

MR. STOCKTON. Food is important. In fact, we devote, I would imagine, a surprising amount of resources to it. We have an agricultural economist whose job is to follow those developments and report on them. It is his view—and based on both the futures prices and some

of the modeling that we have done—that we will see a deceleration going forward in retail food prices. As you know, futures prices basically are projecting a flattening-out. I assume that is part of what is in Nathan’s forecast as well. We are not trying to outguess the markets in that regard, and the reports that we have received on agricultural production look relatively favorable for the coming year. Now, most of that is a bit of winter wheat at this point and not much more in terms of production, although we have seen some significant rebuilding of both flocks and livestock herds that suggests that we are on the right track in terms of an output response to the higher prices that we have seen in the past year. Markets are tight, and I think there probably is some asymmetry in the risk surrounding the food price forecast, in that it is easier to see some possibility of stock-out problems if there is any shortfall in production over the coming year, than that there would be some massive boom in agricultural production that will depress prices sharply. But I do think—and in the Greenbook Part 2 quite often, especially in the autumn, when we are actually doing a more careful accounting of the harvest—we devote a fair amount of attention to resources to it. We can certainly do even more going forward.

MR. FISHER. Thank you.

MR. SHEETS. Just to underscore what Dave has said, our forecast is driven largely from the quotes from futures markets. So, really, the question boils down to, Why in the world do the futures markets expect the prices of these foodstuffs to decline? I think a key factor is that there are some important temporary developments that have driven up food prices. There have been adverse weather conditions in a number of Asian economies. For example, in China, they had floods earlier this year that have significantly driven up vegetable prices. In addition, there has been a sustained drought in Australia that has driven up wheat prices significantly. It has been several years that we have seen these drought conditions in Australia. It is an open issue as to

whether that goes away in 2008 or 2009, but the expectation is that at some point that is going to abate somewhat.

So we can point to temporary factors. There has also been a significant imprint on the food prices of a move to ethanol in the United States, and that has driven up the price of corn. At the same time, some acreage that had been in soybeans has shifted to corn, and that has reduced the supply of soybeans and driven up that price as well. But it is our view and I think the view of the futures markets that over time you are going to see some of these effects balanced out, and the acreage production will be distributed in a way that will help bring these prices down. In addition, you could get more acres brought into production of these foodstuffs.

The final point that I want to emphasize here is that there are also some important structural factors that are driving up food prices, two that I think are worth mentioning. One is that you have a lot of people in these emerging-market economies who are a lot wealthier than they were ten years ago, and they want to eat better, and the world is going to have to find a way to produce more and higher-quality agricultural goods. It is imaginable that there will be some upward pressure on price through that transition. The second important factor that I think is structural is we have seen a sustained and now an apparently permanent increase in the price of oil. It takes a lot of petroleum to produce these goods, so that is a longer-run factor that may contribute to higher agricultural prices.

MR. FISHER. Thank you for your thorough answer.

CHAIRMAN BERNANKE. President Evans.

MR. EVANS. Thanks. Dave, I have two questions, I suppose. The first one is that the Greenbook GDP forecast has come down a good bit since October. At the same time, the Greenbook-consistent short-run equilibrium real funds rate was revised down  $\frac{3}{4}$  percentage

point. How much independent information is there between these two observations? I mean, the equilibrium real funds rate is the rate which, if maintained for some period of time, would get us back up to potential growth. So the fact that you have marked that down suggests that you would have a lower real rate. The second question is this: We were expecting the economy to slow during the current period. Expectations of slowing versus slowing that is revealed in the data are very important for how we think about the outlook—maybe you said this, but I don't recall it. Could you give me an idea of how in the Greenbook your assumptions have evolved since October with regard to prospective losses due to mortgage foreclosures and the write-downs that the banks are expected to take or have announced on this? Do you have some numbers in mind on how things have changed in that regard and how that might be influencing your housing outlook? Thank you.

MR. STOCKTON. In response to your first question about whether there is independent information in that estimate of the equilibrium funds rate for the Greenbook-consistent measure, the answer is that there is no independent information. It's just a transformation of the revision in the GDP outlook into interest rate space. Now, obviously, we provide a few other measures in that table, some based on a large-scale econometric model and some on smaller-scale models. Those have come down, too. So I don't think our forecast is doing something different from, well, what those other models suggest. In response to your second question, our forecast of housing activity going forward is not driven by the foreclosures. The foreclosure forecast that we have is driven importantly by the house-price developments, and there we have marked down our house-price forecast. We would expect some increase in foreclosures, and obviously that would have some feedback on overall lending and conditions of bank balance sheets.

In general, since the October forecast, we have built in more broadly about  $\frac{1}{4}$  percentage point to the level of GDP in additional restraint on spending coming from the increased overall financial turmoil—not just in the housing markets, but we’ve taken down a little our forecast of consumption and our forecast of business fixed investment too. Basically, looking at the past correlation between measures of overall financial stress and the residuals of our spending equations, there’s considerable correlation there. That is, our standard models, as I noted in the past, have very rudimentary financial transmission mechanisms in them—mostly a few interest rates, a few asset prices, housing, equity, and the exchange rate. In the past, periods when we’ve seen significant increase in financial stress have also been associated with significant shortfalls in spending, and we’ve tried as best we can to build that in. Most of that effect overall is in housing—over half of it—but some of it we think will spill over elsewhere. Those bank balance sheets are going to be impaired. We think there will be some restraint on lending going forward. But, boy, it’s a lot of guess work! On the housing side, I do think we can go through more-careful calculations of the implications of the shutdown of the nonprime market and the current impairment in the jumbo markets, but beyond that, I’d say we’re very loosely calibrating it.

MR. EVANS. Thank you.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. Dave, I want to lump together all the various forms of financial distress here—the mortgage market, auto loans, credit card loans, and maybe even business failures. If my memory serves correctly (and it may well not), if we look at the history of business cycle fluctuations, all those different forms of financial distress rise after a business cycle peak when we have increases in unemployment and actual declines in GDP. Assuming that we are not after a business cycle peak right now, it appears that we have a great deal of financial distress ahead of—



I'm hoping it remains ahead of—a business cycle peak. So this is a very atypical situation in the context of U.S. business cycle history.

MR. STOCKTON. I don't actually know in terms of the lag between financial stress and activity. They look very contemporaneous in many cases, and in some cases, obviously, they are past leading indicators of economic activity, such as the Stock-Watson index, which ultimately didn't work all that great, but for a while it looked as though various quality spreads and term spreads had some leading indicator value. So I'm not totally sure about whether or not this looks incredibly unusual in that the stress might have increased.

MR. POOLE. I'm talking particularly about the delinquencies, foreclosures, and business failures because I think that they usually occur on the way down during the contraction phase of the business cycle and ordinarily those measures look their best close to a business cycle peak. That's what I remember, but I haven't gone back and reviewed it, but from just my memory of looking at a lot of business cycle data over the years. That would say that, if my observation is correct, this is quite an unusual situation—unless of course we are past the peak or right at the peak.

MR. STOCKTON. This is obviously a situation in which, in some sense, the financial stress is the shock to the system rather than the endogenous response to some other shock, either an aggressive tightening of policy or some other type of aggregate demand shock. So in that sense this particular configuration, I think, sort of fits with the situation we're currently facing. Obviously we're not forecasting a business cycle peak. So in our forecast, we're not yet saying that we're on the downside of a business cycle. We have a growth recession in this forecast and nothing more than that. If we were to get a true cyclical downturn, I think you could obviously expect that to have some very considerable effects on foreclosures, business failures, and so forth; that channel or mechanism would amplify the downturn in this particular episode.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Dave, I'm having difficulty reconciling the employment and hours data for the current quarter with your forecast of no growth whatsoever. It seems to me that, even if domestic final demand doesn't grow or grows little, we still have inventories and exports that could take up whatever output turns out to be, and we don't know very much about those two components for the current quarter, if I understand the situation right. Alternatively, obviously you can get a very bad productivity number, and that would square the circle. But I'm wondering what we know in particular about inventories and exports that would lead us to something as weak as this forecast.

MR. STOCKTON. In the forecast, in fact, we do square the labor market with our forecast of weak GDP with basically flat labor productivity. Now, that's coming on the heels of a quarter in which we had a 6 percent increase in nonfarm business labor productivity. That's a huge gap, and I don't think in some sense that the level of productivity that we're forecasting here is at all at odds with the basic trend that we've been seeing. Now, when you ask me what we know about inventories and net exports, I'll let Nathan speak to the net export side of things. On inventories we know virtually nothing at this point, and this forecast is actually predicated on non-motor-vehicle inventory investment stepping up. We have some offset in some sense built into this forecast on the non-motor-vehicle side, that there will be some, we think, unintended accumulation of inventories in the fourth quarter. Obviously the standard error around our forecast is very large, and it includes much higher numbers on inventories, which if that were to be the case, would obviously not bode well for activity going forward because we certainly don't see inventories currently as so lean that they need to be rebuilt. As I indicated on the final sales side, at this point we do have, I think, enough data in hand to make us pretty comfortable with the notion that there's going to be a considerable slowing in final demand in the current quarter. Nathan, do you want to say anything?

MR. SHEETS. Yes, just to echo what Dave said, we have very little hard data so far, essentially no hard data for net exports for Q4. We will be receiving the October trade data later this week. So at that point we'll start getting a bit more insight into it. That said, we see the contribution from net exports falling off from a substantial 1.4 percentage points in Q3 to just a touch above 0.1 in Q4, and that's driven by a moderation in export growth and continued 4 percent import growth. But obviously there's a lot of uncertainty around those projections.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. I have sort of a longer-run question that I'd like to pose. I was looking at the alternative scenarios in the Greenbook, and one of the things that I was looking at was the funds rate path that was described as the market-based forecast for the funds rate. It drops almost 150 basis points, or 100-plus basis points, between now and the middle or end of next year. One consequence of that, though, seems pretty benign—that there's not much change in the inflation forecast at least through 2009; it changes only about 0.1 percentage point—and there are some positive effects on output, particularly in '09. It appears, at least within this period, that 100 basis point rate cuts seemed to be pretty much free. So I guess my question to the staff is, Is there a price to be paid for that, and if I run the forecast out beyond 2009, will any of those prices or those consequences appear in the forecast for inflation? If so, how long would I have to look before I saw them in the model?

MR. STOCKTON. I don't think you'd need to look much farther than the horizon that we're showing here to see that, in the context of the staff's view about activity, that path for the fed funds rate would probably not be sustainable because in some sense our IS curve is considerably stronger than the market's currently. If it makes you feel a little better, we are planning on incorporating the extended forecast into the Greenbook next time, and we want to take these

alternative scenarios and push them out because we recognize that one of the weaknesses in the relatively short period that we have here is that much of the interesting action in these often takes place just beyond the time frame that we're showing. So I think that will help.

MR. PLOSSER. I appreciate that. That would be very helpful to put in some perspective what tradeoff in the costs we might see. Thank you.

MR. STOCKTON. We should make some progress there.

CHAIRMAN BERNANKE. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you. My first question is an extension of President Evans's question. Dave, there are two things to your monetary policy assumption in the Greenbook. One is that you lowered the path 50 basis points over the forecast period, but the way you did it was sort of interesting. You did 25 now, and you did the rest just at the point where I think in your forecast the economy is coming back up toward trend growth. Can you say a little about the shape of that path?

MR. STOCKTON. Yes. In some sense that reduction in the middle of 2009 goes back to President Plosser's point. We're trying to get on track so that when we actually show the extended Greenbook, we have been following, roughly speaking, the optimal control simulation on a 1¾ percent inflation target. The 25 basis points up front is in some sense dealing with the current weakness in overall activity. The 25 basis points in 2009 really reflects the fact that, at that point, inflation is coming down a little and you've opened up an output gap. You have an unemployment rate at 5 percent, and you can start a process then, according to that optimal control, of lowering the real funds rate to encourage growth to move above potential and eventually reduce the unemployment rate back toward the NAIRU. I recognize it's going to be a cosmetic—I mean, not a cosmetic but a small analytical wrinkle—that might be more confusing than enlightening. But, as

you know, in the Greenbook extension memo that we circulate, we do see the fed funds rate coming down to 4 percent or below in the extended Greenbook part. So it really is more to try to stimulate growth to above potential once you have inflation moving down.

VICE CHAIRMAN GEITHNER. May I ask one follow-up question? In the note for the Board that you circulated on Monday, Dave, you said that the magnitude of the credit crunch you're contemplating is roughly comparable to the unusual weakness of private spending seen during the headwinds episode of the early 1990s. So I was curious. It is sort of interesting because you think that capital at banks going into this period is much stronger than going into the 1990–91 period. Corporate balance sheets, based just on the crude leverage ratios, are much healthier today than they were then. On the other hand, banks are a smaller share of the financial system, and you could say that the nonbank part looks kind of weak. The FHLB is growing very dramatically, taking up a fair amount of the room left by the shrinking of the nonbank sector. I don't know. GSEs have less room to grow. It's sort of mixed. It's complicated. I was curious about how you thought about the comparison. You didn't seem to like the comparison.

MR. STOCKTON. So the headwinds of the 1990–91 period—that was a calibration we used for the “credit crunch” scenario in the Greenbook.

VICE CHAIRMAN GEITHNER. Oh, it's just the alternative scenario. I misunderstood. I'm sorry.

MR. STOCKTON. In our baseline forecast, we don't have what I would call a real credit crunch. We have some tightening of terms and standards in a period of financial stress that we think will depress spending. But if you're really thinking that we are on the verge of something that looks more like the 1990–91 period, then I think that credit crunch scenario gives you a better sense of the dimensions of the demand shock. Now, as we discussed at the Board meeting yesterday, and

Governor Kroszner suggested, we might want to think about elongating that particular shock. We piled a big shock into a relatively short time, and certainly another reasonable alternative—if you were in a situation like that—would be that you would face a longer period of weak demand but not necessarily that sort of recessionary type of scenario that we showed there.

CHAIRMAN BERNANKE. Other questions? President Evans.

MR. EVANS. As I was looking at the alternative simulations and the credit crunch scenario and trying to make sense of what financial markets are thinking about in terms of the expected fed funds rate path, it seems as though you need that credit crunch scenario to get to that type of path, and that's not where you are. Then there are also other scenarios that are slightly stronger, which I think are in line with more Blue Chip types of forecasts, too. So there really is a disconnect in a lot of this.

MR. STOCKTON. Well, I think, as we showed in the alternative scenarios, something like either the credit crunch or the greater housing correction scenarios—in the real world obviously wouldn't necessarily be shocks that would be independent of each other—but either one of those two scenarios is constructed to produce something that looks similar to what the markets might be thinking. And we don't think those scenarios are unreasonable.

CHAIRMAN BERNANKE. All right. President Hoenig.

MR. HOENIG. David, in listening to this, I have a question. As you are looking at and projecting forward, we're talking about a fed funds rate path that comes down, and yet we've talked a great deal about inflation rising temporarily in some views. The question I have is, Does it give you pause? How do you analyze the risk that you are lowering rates in an environment of rising inflation on a global basis? Do you have any concerns about the risk? Are you reevaluating the risk of how stable inflationary expectations might be in that scenario?

MR. STOCKTON. Obviously in our baseline forecast we don't really have a pickup of inflation, even headline inflation, beyond the very near term. So we do think that, in the next quarter or two, we're going to be looking at some pretty large headline numbers that will be reflecting the jump in energy prices and some lingering increases in food prices.

MR. HOENIG. Right, and you're saying the slowdown in the economy makes that temporary?

MR. STOCKTON. The slowdown in the economy helps in the sense that we do think opening up an output gap is going to limit and eventually bring down some of those inflation pressures. In terms of the risks surrounding the forecast, I think an important element in the baseline forecast is that taking on futures markets for both energy and food—and those markets are expecting almost an immediate flattening-out and even oil prices coming down just a bit—is probably more important in some sense over the next year or so in terms of relieving inflation pressures. Certainly our experience in the past several years is that we don't know any better way to do it. It's not as though the futures markets have done a great job for us; they've always been forecasting that things were going to be flattening out right around the corner. So if you were skeptical about whether that was going to occur, you might be concerned about whether or not you could experience some continued upside surprises there. Now, we've been encouraged in looking at inflation expectations, because we haven't yet seen any really broad-based deterioration, and we think things have to date been reasonably well contained. In our forecast, that continues. This forecast does not assume that there will be any deterioration of inflation expectations going forward. If we saw that, it would be at odds with what we're seeing now and would probably lead us to revise up the forecast.

MR. HOENIG. Thank you.

CHAIRMAN BERNANKE. Okay. Let's begin our go-round. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. At the time of our last meeting, I held out hope that the financial turmoil would gradually ebb and the economy might escape without serious damage. Subsequent developments have severely shaken that belief. The bad news since our last meeting has grown steadier and louder, as strains in financial markets have resurfaced and intensified and as the economy has shown clear signs of faltering. In addition, the downside threats to growth that then seemed to be tail events now appear to be much closer to the center of the distribution. I found little to console me in the Greenbook. Like the Board staff, I have significantly marked down my growth forecast. The possibilities of a credit crunch developing and of the economy slipping into a recession seem all too real.

Conditions in financial markets have worsened. Rates on a wide array of loans and securities have increased significantly since our last meeting, including those on term commercial paper, term LIBOR, prime jumbo mortgages, and high-yield corporate bonds. CDS spreads from major financial institutions with significant mortgage exposure, including Freddie and Fannie, have risen appreciably. In addition, broad stock indexes are down nearly 5 percent. At the same time, measures of implied volatility in equity, bond, and foreign exchange markets have all moved up, reflecting the greater uncertainty about the economy's direction.

The most recent data on spending have been discouraging as well. Data on house sales, prices, and construction have been downbeat, and foreclosures on subprime loans have moved even higher. Even with efforts such as those facilitated by the Administration to freeze subprime rates, foreclosures look to rise sharply next year, which may dump a large number of houses on a market already swamped with supply. This will exacerbate the downward pressure on house prices and new home construction from already elevated home inventories. Indeed, the ten-city



Case-Shiller home-price index has declined more than 5 percent over the past year through September, and futures contracts point to another sizable decline over the next twelve months.

I am particularly concerned that we may now be seeing the first signs of spillovers from the housing and financial sectors to the broader economy. Although the job market has remained reasonably healthy so far, real consumer spending in September and October was dead in the water, and households are growing more pessimistic about future prospects. The December reading of consumer sentiment showed another decline, and the cumulative falloff in this measure is becoming alarming. Gains in disposable income have been weakened. With consumer sentiment in the doldrums, house prices on the skids, and energy prices on the rise, consumer spending looks to be quite subdued for some time. This view is echoed by the CEO of a national high-end clothing retailer on our board, who recently emphasized to us that the positive chain store sales data in November were in fact artificially boosted by the Thanksgiving calendar shift and that the underlying trend for his business has worsened notably.

My modal forecast foresees the economy barely managing to avoid recession, with growth essentially zero this quarter and about 1 percent next quarter. I expect growth to remain below potential throughout next year, causing the unemployment rate to rise to about 5 percent, much like in the Greenbook. This forecast assumes a 50 basis point decline in the federal funds rate in the near future, placing the real funds rate near the center of the range of estimates of the neutral rate reported in the Bluebook. I should emphasize that I do not place a lot of confidence in this forecast, and, in particular, I fear that we are in danger of sliding into a credit crunch. Such an outcome is illustrated by the credit crunch alternative simulation in the Greenbook. Although I don't foresee conditions in the banking sector getting as bleak as during the credit crunch of the early 1990s, the parallels to those events are striking. Back then, we saw a large

number of bank failures in the contraction of the savings and loan sector. In the current situation, most banks are still in pretty good shape. Instead, it is the shadow banking sector—that is, the set of markets in which a variety of securitized assets are financed by the issuance of commercial paper—that is where the failures have occurred. This sector is all but shut for new business.

But bank capital is also an issue. Until the securitization of nonconforming mortgage lending reemerges, financing will depend on the willingness and ability of banks, thrifts, and the GSEs to step in to fill the breach. To the extent they do, that will put further pressure on their capital, which is already under some pressure from write-downs on existing loans and holdings of assets. Banks are showing increasing concern that their capital ratios will become binding and are tightening credit terms and conditions. Several developments suggest to me that this situation could worsen. In addition to the problems plaguing the adjustable-rate subprime mortgages, delinquencies have recently started to move up more broadly—on credit card and auto loans, adjustable-rate prime mortgages, and fixed-rate subprime mortgages. My contacts at large District banks tell me that, because the economy continues to be reasonably healthy and people have jobs, things are still under control. But if house prices and the stock market fall further and the economy appears to be weakening, then they will further tighten the lending conditions and terms on consumer loans to avoid problems down the road, and these fears could be self-fulfilling. If banks only partially replace the collapsed shadow banks or, worse, if they cut back their lending in anticipation of a worsening economy, then the resulting credit crunch could push us into recession. This possibility is presumably increasingly reflected in CDS and low-grade corporate bond spreads. Thus, the risk of recession no longer seems remote, especially since the economy may well already have begun contracting in the current quarter.

Indeed, the December Blue Chip consensus puts the odds of a recession at about 40 percent. This estimate is within the range of recession probabilities computed by my staff using models based on the yield curve and other variables.

Turning to inflation, data on the core measure continues to be favorable. Wage growth remains moderate, and the recent downward revisions to hourly compensation have relieved some worries there. Inflation expectations remain contained. As I mentioned, I expect some labor market slack to develop, and this should offset any, in my view, modest inflationary pressures from past increases in energy and import prices and help keep core PCE price inflation below 2 percent. Continued increases in energy and import prices pose some upside risk to the inflation outlook, but there are also downside risks to inflation associated with a weakening economy and rising unemployment.

To sum up, I believe that the most likely outcome is for the economy to slow significantly in the near term, flirting with recession, and I view the risk to that scenario as being weighted significantly to the downside. In contrast, I expect inflation to remain well contained, and I view those risks as fairly balanced.

CHAIRMAN BERNANKE. Thank you. President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. I think I took the same pessimism pill as President Yellen this morning. The Greenbook makes very somber reading, and I would make several observations about the forecast it provides. First, Greenbook forecasts of two successive quarters of growth below 1 percent are quite rare, and often in the past have occurred shortly before or during recessions. Second, the 70 percent confidence interval for the Greenbook projection of GDP, using historical forecast errors, has a negative lower bound. Third, I would note that when the unemployment rate rises at least  $\frac{1}{2}$  percent, it tends to rise

much further than just  $\frac{1}{2}$  percent. That is, historically, when we have unemployment rates rise  $\frac{1}{2}$  percent, we have subsequently found ourselves in a recession. These observations indicate that, while a recession is not forecast in the Greenbook—as David has been careful to state—the probability of a recession is clearly elevated.

At our last meeting, the housing market was very soft, but weakness in other components was not yet reflected in the data. But now we have some evidence that consumption and investment may also be slowing, and residential investment may be even weaker than we thought. While incoming data have generally been weak, some higher-frequency data, like the recent labor report, might be consistent with a stronger outlook than the Greenbook forecast. However, I am concerned that housing prices may actually fall more than assumed in the Greenbook, potentially resulting in consequences that are difficult to forecast with models using only postwar data. I am also sympathetic to the view that disruptions in financial flows have the potential to result in significantly more weakness than would result from an econometric model that does not capture significant liquidity disruptions, in part because the occurrence of such events is quite rare. Added to these concerns is the current state of financial markets both here and abroad. The elevated rates for term lending, even over relatively short maturities, indicates significant risk aversion by market participants. Financial institutions with very low probabilities of default, as measured by credit default swap rates, are nonetheless having difficulty securing term lending over year-end.

Bank supervisors of large financial institutions are beginning to report correlations in nonperforming experiences of auto, credit card, and mortgage loans. Geographic regions hard hit by mortgage defaults are also experiencing rising default rates in other types of loans. Portfolios that are not highly correlated during good times can become highly correlated during

bad times, and the initial trends being reported in bank supervision are not encouraging. I would also highlight this as one of the instances in which bank supervision is providing some very relevant input into thinking about the macroeconomy.

Finally, I would highlight several institutional concerns that could have broader implications. First, financial guarantors, as was highlighted earlier, have credit default swap rates inconsistent with their AAA rating. Significant downgrades would further depress CDOs but also disrupt the municipal bond market and force some banks to fulfill agreements to purchase securities that do not maintain at least an AA rating. Second, there is the potential for significant further announcements of downgrades of assets related to SIVs and CDOs. Money market funds are currently experiencing inflows. However, those flows could quickly reverse if investors lose confidence in their ability to redeem money market funds at par. Third, I would note that for securities like lower-grade bonds that have not previously shown elevated risk premiums, those premiums are now becoming quite elevated, providing evidence that what was initially a liquidity concern is now becoming a more widespread and generalized concern about the state of the economy.

With core inflation a little below 2 percent, and future reductions in labor market pressures likely, we have the flexibility to respond aggressively to slowing economic growth and the ongoing financial turmoil. This seems to be the appropriate time to take significant further action, knowing that, should the economy perform much better than we currently anticipate, we could be equally nimble in raising rates as appropriate.

CHAIRMAN BERNANKE. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. Just before the meeting I learned something about how we select the order. There are a bunch of us sitting with Debbie, and most people

seem to want to go toward the end. Debbie apparently has been in touch with too many econometricians because she said it is “overdetermined.” [Laughter] Anyway, here I am.

Let me start with some of the anecdotal reports. It is pretty clear that the anecdotal reports that I am getting from large national firms on the goods side of the economy are coming in on the soft side. The holiday season, according to UPS, is coming in about 2 percentage points below projection; and UPS and FedEx are revising down somewhat their longer-term projections and their capital spending plans. My FedEx contact said that the less-than-truckload business is, in his terms, pitiful. My contact with a large trucking company, J.B.Hunt, said that the company is cutting its capacity. Its volume is down 13 percent from a year ago. The company has reduced capacity 13 percent over the past twelve months and will cut another 12 percent. That is, after all, a full one-quarter cut in capacity of that company. Hunt is selling its trucks. Many of them are going to Russia, interestingly enough. Perhaps the only good news from this company is that drivers are plentifully available, which has not been so true in the past. In the quick-serve restaurant business, there is a ray of hope. The projection is that food prices will increase much more modestly than they have been doing this year, but they said that most people in the restaurant business are pessimistic. On the other hand, a large software company reports that it is optimistic. The sales of PCs are good, gaming devices and software are doing well, and cap-ex plans are substantial—nothing being cut back there. A contact with a large money center bank said that the bank’s analysis of its consumer credit card business indicated that the increase in thirty-day delinquencies is entirely explained by what is going on in Florida, California, and Nevada, and delinquencies in the rest of the country are about unchanged.

A general comment on the business outlook: We have a lot of specific news—and certainly Janet talked about some of that—that is pretty negative. I have an inherent optimism

about the economy, which is hard to put any real flesh on the bones I guess, but I think that the economy in the longer run is inherently strong and resilient. A lot of the adjustments in the credit markets I believe are under way. We see it with a lot of the recapitalizations that are taking place and the initial shock back in July and August. There are a lot of smart people with sharp pencils who are digging into their situations, deciding what to write off, and then getting on with things; and they are past the initial scramble. So those things together give me some sense of optimism. I would also note that, although many households are certainly stressed, there does seem to be a lot of discretionary spending taking place—consumer electronics, for example, are pretty strong. There was an article in the newspaper noting that the hot items this Christmas season are GPS navigation devices. To add one of these to your car hardly seems to be an essential expenditure. Computer games are another example.

MR. MISHKIN. Talk for yourself, Bill. [Laughter]

MR. POOLE. I bought my GPS a long time ago, and I don't play computer games. But at any rate, flat panel TVs, a lot of stuff like that, suggest that many households are not on the edge of being highly stressed. So I don't know where to come out on this. I guess that my outlook has more variance to it than usual, and it seems to me that, when we get to the policy discussion, what we need to do is to find a way to react promptly to the surprises that I think are inevitably ahead of us. Thank you.

CHAIRMAN BERNANKE. Is the sale of a used truck to Russia an export or a capital inflow? [Laughter] Think about that one.

MR. POOLE. Well, it is not current production, so it is not an export.

CHAIRMAN BERNANKE. No, I understand. Let's see. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Economic conditions in the Fifth District appear to be generally sound but with some notable areas of weakness. Our survey readings on the services firms indicate continued moderate growth in November, and our index of manufacturing activity gained a few points following a sharp decline in October, though it remains in neutral territory. A number of our contacts reported that the weaker dollar is providing a boost to manufacturing exports, and I have noticed a definite increase in the number of coal trains rumbling by my office on their way from West Virginia to port. On the other hand, our merchant contacts were much less optimistic about their sales prospects going into the holiday season. Our retail sales survey indicator slid another 8 points, pulled down by significant declines in big ticket sales and shopper traffic components. District housing markets continue to weaken overall, with distinctly more-pessimistic tones in some markets, particularly around the D.C. area, although there are a couple of areas that are still reporting decent activity to the south.

In commercial real estate, reports from the retail and industrial markets are generally upbeat. One former director, whose firm owns a sizable portfolio of retail properties throughout the East Coast, described the sector as in the best shape he has seen in his lifetime, and he is by no means a young man. Industrial leasing appears to be in good shape, even tight in some markets. In the office market, however, contacts in Maryland and the Carolinas report slower office leasing activity in October and early November.

The community bankers I have talked with say that portfolios are still quite clean but that they are scrutinizing deals much more carefully in the current environment. They also complain that large banks are raising deposit rates and competing more intensely for deposits. At large banks, the cost of capital has increased, and they are responding accordingly by reevaluating the



profitability of various lines of business. This does not appear to have resulted in any wholesale cutback in lending but more in a tightening of terms in selected market segments.

I view the information from our District as fairly consistent with my economic outlook at the national level. Housing investment continues to contract, and the overhang of unsold homes and general tightening of credit terms suggest a quite prolonged period of relatively depressed activity. Consumer spending clearly has slowed. For the months of September and October, real consumption showed almost no growth. While early reports on the holiday shopping season are notoriously slippery, it seems clear that shoppers are far from ebullient, perhaps with the exception of these GPS toys. This seems consistent with the virtual absence of growth in real disposable income over the past two months and the flattening-out of household net worth in the third quarter. Job growth has shifted down to a more modest pace over this year, and revisions to the payroll series, when we finally get them, seem likely to make the slowdown look bigger. So it wouldn't surprise me if consumer spending came in fairly tame next year. I am expecting a slowdown in consumer spending growth, however, not a sharp pullback. Labor markets are still fairly tight. Household net worth is still at fairly elevated levels. So while the increase in the saving rate projected by the Greenbook for next year is plausible, I think consumer spending could come out on the high side of that forecast.

A key factor in the outlook and a key source of uncertainty is the continuing drama in credit markets. Large banks are bringing impaired assets onto their balance sheets and are facing a higher cost of capital and increased funding costs. It would seem reasonable to expect them to respond by tightening terms of credit for households and business borrowers, implying a further drag on spending. The magnitude of this sort of fallout is still quite uncertain. Reduced credit flows appear so far to be less a reduction in credit supply than in demand. That is, they appear to

reflect a genuine deterioration in borrower creditworthiness in some segments. Residential real estate fits this description as does some, though not all, commercial real estate. Beyond these sectors, we have seen some evidence of yield spreads widening, but the cost of credit to investment-grade nonfinancial firms is low and has been falling along with the risk-free rate, at least until very recently. The flow of credit to such firms seems to have been holding up well, as has the nonmortgage consumer credit flow. So at this point, it does not look as though an indiscriminate, across-the-board credit crunch is taking place, although marginally higher credit costs may exert some additional drag on spending growth. Overall, then, I do see a weaker outlook for growth in the near term, and the timing of the return to trend is going to depend somewhat on the bottoming-out of the housing cycle, which unfortunately appears to be getting even more remote each time we meet.

If we have a more protracted slowdown ahead of us, as seems likely now, we need to be careful not to lose sight of inflation. Core PCE inflation has edged up over the past two months, and it now appears likely to move above 2 percent for a time. Overall inflation, of course, has been higher on average over the last year, and we have seen a slight upward trend in five-year-forward inflation compensation since earlier in the year. In fact, the behavior of energy and food prices over the past several years calls into question the standard presumption we make that overall inflation is going to return to the core inflation trend in a reasonable period of time. That points to the possibility that inflation may give us more trouble ahead.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. Coming out of our October meeting, I expected a period of subpar growth stretching into the middle of 2008. Since I was anticipating some soft data, it was not obvious to me that the outlook had worsened until later in the

intermeeting period. A lot of the data that we have cited are financial items that are difficult to assess and are somewhat unusual for the current period. But the incoming information has caused us to mark down our outlook further, although we don't see growth declining as far below potential as in the Greenbook baseline forecast. Although housing continues to weaken, that by itself did not cause a substantial revision to our outlook. The bigger factor was a noticeable weakening of consumption. PCE was basically flat in September and October—I guess dead on arrival. The financial headlines are taking their toll on consumer sentiment, and higher energy prices are lowering real incomes.

It is not clear, however, that we are seeing a major sustained pullback in consumption; but, of course, that is arguable. The limited information we have about November—motor vehicle sales and the chain store data—suggest at least modest gains in consumer expenditures. I realize that the chain store sales could be a bit artificial. I was talking to one of my business contacts who has a significant presence in retail, and I am accustomed to hearing that, “Well, the Christmas season is a bit short this year, so that could be a problem.” But I actually caught him this time saying, “Gee, it's so long this time that people seem to be losing interest.” [Laughter] On balance, I think the fundamentals for consumption are still reasonably good.

Importantly, although they may be somewhat lagging, the payroll numbers are still consistent with decent growth in wage income, and the unemployment rate remains low. Elsewhere, foreign growth remains good, which along with the lower dollar should support continued growth in exports. We have seen some softening in capital spending as well, but the usual indicators still point to moderate gains in investment. These developments seem reasonably consistent with what I heard from business contacts. Most of them think that growth is slowing, and they are more cautious, but I would summarize their views as guarded and not

alarmist. Furthermore, many say that their improved inventory control methods are preventing an inventory cycle from exacerbating the current situation, and they bring this up without my prompting. So to me their comments do not yet suggest a sharp curtailment in real economic activity.

Of course, the financial markets continue to weigh negatively on the outlook. In my view, the biggest concerns are the large markdowns on structured securities and the volume of assets that may be returning to banks' balance sheets. These effects appear to be larger than the banks had planned for as of October and could have a significant impact on lending capacity. This is an important downside risk to the real economy, as the Greenbook highlights in many places. That said, when I talk with my business contacts, there continues to be a disconnect between the credit conditions they report facing and the turbulence we see in money and credit markets. Outside of lending for residential and nonresidential construction, my CEO contacts at nonfinancial firms do not report much change in credit costs or availability. We have heard this from a number of sources. For example, two of the larger banks in our District said they have not changed terms to borrowers, and they expressed relatively sanguine views of lending conditions overall. For the time being, some lenders report offsetting a portion of their higher funding costs by taking a hit on their interest margins.

Credit conditions for construction-related industries are another matter. A major shopping center developer who has been one of the largest issuers of commercial mortgage-backed securities indicated that this market has dried up completely. However, the developer has been able to obtain financing from other traditional sources, such as life insurance companies. He is paying similar interest rates, he says, but the terms include lower loan-to-value ratios. So there is some credit effect, but he still has access for the moment. That is a bit like what

President Lacker was suggesting. He said the switch is not a big deal for him currently, but if it continues for too long—say, for more than six months or so—it would then weigh more heavily on his business activity. The evolution of such developments will obviously be an important thing to watch over the next few meetings. I would just note that I don't often look at the Duke University survey of CFOs. But as I looked at it—and I don't have a great deal of experience—it did seem to indicate that they had higher spending plans on average from their September survey for capital expenditures and technology spending. It wasn't a great bit, but given all the negative headlines associated with the credit conditions—which are unweighted, whereas these spending plans are weighted—that was a bit of a surprise.

Putting all of this together, we have marked down our current quarter and 2008 real GDP forecasts 0.4 percentage point, which is pretty significant. We now have growth next year of  $2\frac{1}{4}$  percent. We expect growth to improve to our assessment of potential thereafter, namely about  $2\frac{1}{2}$  percent. This forecast assumes two policy easings, similar to but sooner than the Greenbook, and it is shaded toward the “stronger domestic demand” alternative scenario, which has less financial restraint on PCE and business fixed investment than in the Greenbook baseline.

Turning to inflation, our forecast is for PCE inflation to settle in at 1.8 percent. This continued favorable projection for inflation is important for my policy views now. We think resource utilization likely will be about neutral for inflation over this forecast period. Our GDP projection does not result in appreciable resource slack over the forecast period. Even under the weaker Greenbook scenario, the GDP gap remains less than  $\frac{1}{2}$  percentage point. But there are upside risks. The most recent data on core prices have been a bit higher. The lower dollar could put pressure on prices, and my business contacts remain concerned about the cost of energy and other commodities. Finally, at least by the Board staff calculations, five-year forward TIPS

inflation compensation has moved up to the range that it was in during the spring of 2006, a period when we were more concerned about the inflation outlook. I wouldn't put too much weight on this particular inflation expectation development at the moment, but it may be looming ahead. So I continue to see upside risk to inflation, which if realized would complicate our policy reaction to developments on the growth and employment side of the ledger. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. It probably goes without saying that I think the main development since the last FOMC meeting has been the renewed deterioration in some of the financial markets. In the absence of that—that is, had financial market conditions either stabilized or continued to improve as they had from the September to October meetings—we would be probably having a somewhat different conversation this morning. We would be talking more about parsing the recent incoming macro data and talking about whether the economy was slowing as anticipated or a little more or a little less. We should remember, we were expecting a significant slowing in the rate of growth, and that in fact does seem to be occurring. But, as I said, I think the financial market developments have been the dominant ones.

As far as the economic outlook is concerned, my view of the next few quarters is for growth a bit better than that in the Greenbook for a couple of reasons. One is that I think the incoming data, as always, are noisy, and I am reluctant to put a lot of weight on them. Second, it seems to me that some of the underlying fundamentals, particularly the labor market data, present a more favorable picture of the outlook than the spending numbers at the moment. But it seems to me that the risks are clearly on the downside, and they are on the downside because of financial market conditions. Perhaps the most interesting anecdote I came across in the

intermeeting period was that about two weeks ago we had a meeting with about fifteen leaders from firms in the financial services industry in the Twin Cities. There was a good deal of concern among, I would say, virtually all the participants in that meeting, and it wasn't so much about year-end funding and that kind of thing. It was really about the economic outlook, and it had to do with the fact that some markets are not working or are barely working at the moment. There is no doubt that in their own businesses they are all tightening terms and other conditions. They believe that is appropriate, but they wouldn't argue that it isn't going to have an effect on spending. They also believe that at least some of their customers are acting in anticipation of that. That is, they are starting to cancel or at least delay spending plans, believing that they aren't going to be able to find financing or at least find financing at terms they would like. So it seems to me that we are in an environment, as far as financial conditions are concerned, where that poses a very real downside threat to what otherwise might be a pretty acceptable economic outlook.

Just a word about inflation. I haven't changed my outlook for inflation going forward. I don't have a sense from the incoming information that there is any compelling reason at the moment to do so. Thank you.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. The conversations that I have had with my business contacts indicate that business conditions in our region have clearly softened since the last meeting and perhaps even more than what is reflected in the Beige Book report that we prepared just a few weeks ago. A sense of pessimism about the economic outlook seems once again to be sweeping over our business community, and it is not just the financial community. This is a decided change from what I was hearing in October and is clearly an added threat to our

already fragile outlook. My banking supervision staff reports that the District banks continue to address the risks in their portfolios by shifting focus away from residential and commercial real estate and by requiring more collateral, stronger covenants, and better debt-service coverage in their deals. But our examiners are not reporting that capital positions of our financial institutions have been impaired such that they cannot accommodate sound projects. A few of the corporate CFOs I talk with say that credit commitments are more difficult to come by. The CEOs of the Fourth District financial institutions advise me that what we are facing is a liquidity squeeze and not at present a credit crunch. That said, these bank CEOs have expressed concern that their capital positions could become impaired if the current pressure for more liquidity forces them to sell some of their assets at large discounts.

The incoming data for the economy appear to be unfolding reasonably close to my October projection. I was fairly pessimistic about our near-term growth prospects, and that pessimism seems to have been well founded. So the economic data by themselves haven't been enough to push me off the forecast trajectory that I submitted at our last meeting. But as I noted earlier, I do observe a sharp drop in business confidence across a broad collection of industries, not just those tied to residential real estate. What I am hearing sounds more substantial than the transitory slowing that I was projecting just six weeks ago. What I am hearing from my business contacts is probably more aligned with the prolonged slow growth outlook that I now see in the Greenbook baseline, or worse. I am somewhat thankful that I didn't have to submit a projection for this meeting because I am torn between what my mostly data-driven model says and what I am hearing from my business sources. About the only thing that I can say with much confidence is that the reemergence of liquidity pressures, combined with the deterioration in business confidence, has increased the downside risk to growth. I think it is prudent to address that risk



with our policy decision today, but I will hold my comments about our policy moves for later in the meeting. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. I think President Stern framed it well in bringing focus to the effect on our thinking that the financial markets are having. As many have said, the central question is not whether the economy is softening but whether it is softening beyond the range that underpinned the policy decision in October. I'd add to that a range of questions related to financial markets, particularly the question of whether the deterioration in the financial markets changes the prospects for achieving financial stability, the potential for spreading to a wider array of financial markets and institutions, the potential for spillover to the general economy, and the compounding of the already heightened degree of uncertainty. All of these weigh heavily on my thinking. Like the Greenbook projections, Atlanta's forecast has been revised down as a result of incoming data since the last meeting. I just point out, speaking only for ourselves, that these downward revisions of previous forecasts and our general outlook have been a pattern over recent months.

The current situation is extremely difficult to read—which is another way of saying that uncertainty around our forecast has increased yet again. Contributing to this uncertainty is the continuing, if not accelerating, gap between the anecdotal information and the views I've received from Wall Street versus Main Street. The expectations of financial market participants have deteriorated and can be characterized as extremely serious. However, the message I get from directors and representatives of nonfinancial businesses outside the housing sector, though relatively pessimistic, has not changed substantially since our October meeting. In my conversations with financial market contacts, to varying degrees I heard the persistent and growing apprehension

concerning the spread of turmoil to an expanding set of affected markets and institutions and a wondering of what will be the next shoe to drop. One consistent message is the belief that the recent volatility and increase in term spreads cannot be entirely explained by the year-end problem. Most of my contacts agreed that year-end balance sheet concerns are adding to market stress, but no one expressed confidence that getting past year-end will bring much reduction of concerns over counterparty weakness, asset values, and secondary market liquidity. Most expect financial market turmoil to be protracted, with increasing risk to the general economy. Almost all my contacts noted that deteriorating housing values are a root cause, feeding problems in the markets. This view holds that the adjustment in prices and inventory required to stabilize the housing sector will take many months to play out, and until that occurs, the value of structured financial instruments and the solvency and liquidity of structured investment vehicles will be uncertain. There remains a great deal of skepticism that arrangements like the super SIV and the Treasury's rate freeze plan will have much tangible effect. The issue of SIV restructuring and support by sponsors is a growing focus of concern because of their linkage to money market funds as well as their contribution to a general contraction of credit availability. In sum, my contacts in the financial industry uniformly express the belief that things will not get better any time soon and may well get worse. While recognizing that a rate reduction does not directly address the information problems in the markets, there is widespread sentiment that lower costs of funds will help.

Turning to the anecdotal inputs from contacts in my District, there is some divergence of views between contacts directly affected by the housing sector, including bankers, and others. Bank loan activity remains particularly weak in real estate segments. Trucking, large retailers, auto dealerships, and businesses supplying building materials and household durables were identified as segments where loan volumes are slipping. Industrial warehouse markets have weakened in some

metro areas as subcontractors have exited. Bankers also expect that consumer credit exposures in credit cards, auto loans, prime mortgages, and HELOCs will see a combination of credit deterioration and demand contraction in 2008. The anecdotal messages from other contacts are less dire. We took great care in our information-gathering this round to probe hiring expectations, investment plans, and credit availability conditions. Though credit conditions do seem to have tightened, we still are not hearing that they are preventing planned spending. Spending and hiring plans remain on the weak side, but no more so than was the case at our October meeting. Consistent with the Greenbook projection for exports, we heard that spending from abroad, including international tourism and condo-purchase activity, continues relatively strong. At the branch board meeting in Miami, I heard that Russians are the latest foreign buyers of condos. So combine that with President Poole's comment on trucks, as a child of the Cold War, I think it is very ironic that our bailout is coming from the Russians. [Laughter] On the employment front, the demand for workers in sectors such as hospitality and energy remains quite strong, but overall plans appear to be more cautious. The trend in regional labor data mirrors the slowing trend in the national statistics.

Each FOMC round my staff provides a summary sentiment index of expected economic conditions over the next six months based on responses of directors and contacts. Relative to the October meeting, that index is little changed, with the majority expecting flat or slower growth. When I combine the somewhat, but not dramatically, worse data inputs since the last meeting with the anecdotal and survey information from regional and other markets, I'm left with a view that economic fundamentals, current and prospective, have not yet fallen off a cliff. That being said, there's not much of a case to be made for any risk assessment other than one weighted to the downside. In my view, the potential for protracted and growing financial market troubles should

weigh heavily in the policy decision, and though recent core inflation readings are acceptable, I continue to be concerned about the ongoing divergence between headline and core inflation. Until they converge, price pressures cannot be removed from the watch list. But overall I see more uncertainty and, therefore, more downside risk in the real economic growth picture. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. There has been little change in the economic conditions in our District since the October meeting. Except for housing activity, manufacturing and other businesses are expanding at a modest pace, somewhat below trend. Our business contacts are a little less optimistic about growth in the near term than they were earlier in the fall primarily because of uncertainty surrounding the outlook rather than any immediate change in their business activity. I'll begin by reporting on what our contacts say about credit conditions. Business contacts as well as our board of directors have told me that credit activity has changed very little. Creditworthy borrowers, as far as they were concerned, have had no problem accessing credit. Banks have reported some tightening of lending standards, but mostly that has occurred for real estate developers and in residential mortgages. Some loan demand has dropped because of businesses' uncertainty about the future, as I suggested earlier. That is, businesses seem to be a bit more cautious. But banks do not appear to be conserving capital. In fact, they're actively seeking good credits. To quote one of my directors, "The crunch on Wall Street has not hit Main Street." A couple of bankers I spoke to, one representing a very large regional bank and another a very large community bank, expressed the view that they were actively seeking to regain market share from the larger banks because they did not engage in the same off-balance-sheet financing of riskier debt that the large banks did and so they were not facing either capital or funding constraints. Some

bankers acknowledge that consumer credit quality seems to have deteriorated slightly, but they reminded me that this was from very good levels. So the defaults and delinquencies remain well within historical norms.

Turning to the economy, payroll employment continues to expand at a somewhat slow pace in our three states, yet the unemployment rate is still 0.4 percentage point below that of the nation. Retail sales picked up in November. Moreover, retailers generally said they met their expectations for the Thanksgiving weekend. However, these sales seem to have been boosted by fairly heavy discounting, according to them; and despite the reasonable showing to date, retailers are wary and uncertain for the holiday season. Housing construction and sales continue to decline, but the pace of that decline is in line with the expectations at the time of our last meeting. Nonresidential real estate markets remain firm in our District. Office vacancy rates continue to decline, and commercial rents are rising. New contracts for commercial real estate have declined, however; but with the decline in vacancy rates and with rising rents, the outlook of many developers is not as negative as the current level of spending would suggest. According to our Business Outlook Survey, manufacturing activity in the District has been increasing at a modest pace for the past few months. The index of general activity moved up slightly, to 8.2 in November from 6.8 in October. This is actually about the same average level that the outlook survey has maintained over the past two years. Shipments and new orders moved up slightly. However, optimism regarding the outlook over the next six months declined. It's a common theme of many of our business contacts that their businesses have not changed much, but they seem to be reacting to the steady stream of negative news, and it is affecting their outlook. Indeed, the CEOs of several very large industrial firms in our District report business to be very strong both domestically and overseas, and the CEOs have seen little effect of the turmoil on Wall Street on their ability to obtain credit.

Now, last time I said that there had been little change in the District's inflation picture. However, we have started to see evidence of increased price pressures. The Business Outlook Survey's prices-paid index has risen considerably since the beginning of the year and has doubled since August. The index for prices received has also more than doubled since August, rising sharply in both October and November. Also retailers have noted spreading price increases for imported goods, and a wide range of industries are reporting increases in energy and transportation costs. Firms continue to report higher health care costs, and at the same time, wages continue to be moderate, they say.

In summary, economic conditions have changed little since our last meeting. The business activity in the region is advancing at a moderate pace. Credit constraints experienced by the large money center banks have not appreciably affected the banks in our District or their lending practices. In general, firms in the District remain cautiously optimistic about their businesses six months from now but not so much as they were last month. Price pressures have increased on the input side related to energy and commodity costs; more generally, many firms are now prepared to raise their own prices and are looking to do so in the near future, and the financial conditions of our banks remain good.

Turning to the nation, financial market conditions, especially those associated with the big money center banks, have clearly deteriorated in recent weeks. Until the end of October, spreads were gradually declining. It seems that the potential for a serious meltdown was monotonically declining. However, since early November, as we all pointed to, a number of financial institutions, subprime mortgages, jumbo mortgages, asset-backed commercial paper, below-investment-grade bonds, and LIBOR have experienced increased spreads. Volatility has risen as well. Clearly, risk premiums have risen for certain classes of assets, and investors have fresh concerns about the way

credit market conditions are evolving. Overall, the recent financial developments suggest that it will take longer before conditions are “back to normal” in all segments of the market. As I’ve said before, I continue to believe that price discovery still plagues many of these markets. It now looks as though it will take a little longer before these markets can sort things out and return to normal. Financial institutions continue to write off some of the investments and take losses. I view these write-downs as a necessary and healthy part of the process toward stabilization. Infusions of capital in some financial institutions, I think, are encouraging and helpful to the process. This does not mean that the ultimate agreed-upon market prices for some of these assets will bear any resemblance to what they did before August. Indeed, they probably won’t. But that’s not necessarily a bad sign, nor is it a cause for concern. In general, it may be a very healthy development.

The news on economic activity has softened somewhat since our last meeting. Among the negatives, of course, the housing market and residential investment continue to decline. Foreclosures have continued to grow at unprecedented rates. Firms have become a little more cautious in their investment plans. Consumer spending has softened slightly, and real disposable personal income declined in October. Oil prices have moved higher. On the brighter side so far, there is some evidence of spillovers from the financial and housing markets to the broader economy, but I believe it is limited. Net exports and business fixed investment have been surprises on the upside. Finally, and most important, the labor market still looks pretty solid. Foreclosures and consumer weaknesses appear to be heavily concentrated in those states where the housing boom and thus the housing price declines have been most pronounced—especially California, Nevada, and Florida—and in those states, such as Ohio and Michigan, that are feeling the effects of the decline in automobile manufacturing. As President Poole indicated, credit card delinquencies were up but

highly concentrated in California, Nevada, and Florida. Thus, based on such observations and the news that I hear from my District, I sense that the stresses in the economy vary significantly by region, and we must be mindful that the weaknesses on Wall Street are in those states that have exaggerated housing volatility and may not be representative of the rest of the economy. To be sure, we must be wary of continued deterioration and spillovers, but at this point my assessment is that they remain concentrated in a few regions and are not as widespread as some of the aggregate data might suggest.

It's important to note that, for a good part of the forecast for the fourth-quarter GDP, it's payback for strong inventories and net export numbers in the third quarter. I note that, absent payback and despite the worsening news, economic growth would be on the order of 2 percent higher. To put this differently, the news since the last meeting has not altered the overall GDP forecast for the second half of 2007. It's about the same. The news has clearly altered the Greenbook's forecast for 2008, especially for the first half of the year but also extending into the second half of 2008. The forecast calls for explicit spillovers from financial markets and the housing sector to the broader economy, to consumption, to fixed investment, and so forth. I should note, however, that most private sector forecasters are significantly less pessimistic than the Greenbook. The Blue Chip survey, our just-released Livingston Survey, our Survey of Professional Forecasters, and several of the major forecasting firms that have issued forecasts in the last couple of weeks see weakness extending into the first and maybe the second quarter of 2008 but a much more rapid bounceback in the second half of 2008 than is suggested in the Greenbook. These private sector forecasts are more in line with my own view.

While the news on growth is somewhat on the downside, the news on inflation is on the upside. Readings on core inflation have been stable over the last few months, but headline inflation



rates have risen sharply, with increases in energy and commodity prices. The broader scope of these commodity price increases and their breadth suggest that perhaps there are more-generalized inflationary pressures out there rather than these isolated relative price shocks. I will note that the core PCE inflation rate for March to June was 1½ percent; and in every three-month window subsequently, the inflation rate has risen monotonically, now reaching 2.26 percent for the latest three-month period from August to October. This comes after fairly steady declines in core rates during the first half of the year. In my comments on the Third District, I noted the greater prospects for price increases indicated by our manufacturing firms. I also am going to cite another statistic from the same survey that President Evans referred to—Duke University's *CFO Magazine* survey. The survey to which he referred was a survey conducted in late November and early December of more than 600 CFOs. In the survey, the average price increase that these CFOs were estimating for their own products in the coming year was 2.8 percent, and that was up from just 2 percent in the previous quarter. Thus, it appears that firms are beginning to be more interested in increasing prices and are more able to do so than they were just a few months ago, even though the same CFOs were more pessimistic about the economy than they were in the last quarter.

Another piece of news on inflation expectations comes from the Livingston Survey, which was just released yesterday. There the forecast of the average annual change for the CPI for 2007 to 2008 moved up from 2.3 percent to 3 percent. This, of course, partially reflects the behavior of oil prices during the past several months. The December-to-December forecast, on the other hand, also rose, but only slightly.

Thus, overall, the economy is weak but only slightly more so than I anticipated. Volatility in the financial markets continues, and the repricing of risk has not progressed as smoothly as I would like to see. Nevertheless, the spillovers from the financial turmoil seem geographically

concentrated, and broader spillovers appear limited to date. I view inflation expectations as fragile and see evidence that price pressures are growing and that more and more firms feel that price increases are coming and are supportable. I think we will have to be very careful not to presume that just because price expectations and prices have remained contained that they will continue to be so, independent of our actions. Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I'll start on the local level. Overall our District economy continues to perform generally well, with ongoing weakness in the housing sector being offset by strength in agriculture, energy, and manufacturing. We have seen some slowing in employment growth over the past few months, but this appears in part to be a supply consideration. Our directors and business contacts continue to report that the labor markets are, in fact, tight across much of the District with shortages of both skilled and unskilled labor and rising wage pressures. There is some reduction in employment, obviously in the housing sector, but that is being offset by these other considerations. I would also note that manufacturing activity remains basically solid, with manufacturers reporting strong export orders. The District's manufacturing index moved upward in November and still points to moderate growth. In addition, District manufacturers' capital spending plans actually rose but remained below most of last year's readings on balance.

Turning to spending, general retailers reported a rebound in sales in the latter part of October and early November. Automobile dealers, on the other hand, did report weaker sales and have also become more pessimistic on future sales. Travel and tourism continues to expand in our region, with District airline traffic figures solid, particularly in the Denver area. Likewise, hotel occupancy figures have continued to increase from already strong levels in the region. As has been true for some time, housing activity, as I said, remains soft. For example, the value of residential

contracts dropped again in October, and the rate of decline in residential permits steepened again in the past few months in our region. Offsetting this weakness in housing, though, is considerable strength in agriculture and energy. District energy producers continue to expand their capital investments as they are relatively confident that oil and gas prices will remain firm over the longer term. In fact, their capital expenditures have been slowed by a continuing shortage of labor and access to some equipment. Our larger regional banks are still reporting fairly good conditions. The deal flows seem to be coming through, although they are looking at those carefully, just given the environment that they find themselves in on a national level. Finally, price pressures remain mixed. Most businesses report rising input costs, both labor and materials, but differ in their ability to pass those costs on at this point. In transportation, input costs are passed through one for one through customer surcharges. Other businesses continue to find it a little more difficult to pass through the higher costs, but they are beginning to push harder on that as we talk to them.

Let me turn to the national outlook. Weakness in incoming data and continuing stress in financial markets obviously are noteworthy, and others have noted that here today. Compared with the Greenbook, however, I see stronger growth in both the short run and the longer run. I expect fourth-quarter growth to be closer to 1 percent, not the zero percent in the Greenbook, and the economy to strengthen slowly through a good part of 2008, starting out slowly obviously and then picking up as we go through the year. Comparing my views with those in Greenbook, the basic difference appears to be largely in some of the judgmental adjustments in the Greenbook concerning spillovers from the housing and financial stress to consumer spending. The current Greenbook forecast, as others have noted, is similar to the Blue Chip Bottom Ten forecast, which suggests to me that it might be better seen as the downside risk outlook not necessarily the most likely outlook at this point. The first half of 2008, as I said, is likely to be somewhat slower than I previously

projected because of the high energy prices and continued drag from housing. However, I expect that growth will gradually strengthen as we move toward the end of 2008 and then remain there through the rest of the forecast period. Having said this, I realize that the downside risk to economic activity does remain elevated. The housing slowdown could be deeper and last longer, and continuing financial turmoil could further affect consumer and business spending. However, while financial factors remain a risk to the outlook, in my view the economy, though it will grow below its potential, can weather these forces and is being supported by the policy actions that we have taken in the past two meetings.

Against this outlook for economic growth, let me turn now to the inflation outlook. Year-over-year overall and core inflation rates have risen. In addition, Greenbook's 2008 forecast for overall and core PCE inflation has increased since our last meeting. While below-trend growth in the near term may exert some downward pressure on inflation, the combination of higher prices for oil, commodities, and some services and dollar depreciation should place upward pressure on both overall and core inflation going forward. Over the past several years, the pass-through of dollar depreciation and higher oil prices to inflation has been limited in part because of longer-term inflation expectations remaining, as we said, anchored. My concern is that, if we continue to lower the fed funds rate into a rising inflation environment and the dollar continues to depreciate, these expectations may become unhinged perhaps more quickly than we would like to think. In this environment, I think we should not lose sight of not just the downside risk to the real economy but also some very serious upside risk to inflation. Thank you.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Well, Mr. Chairman, having listened to various views starting with President Yellen, on the one end, and President Plosser, on the other, and President Hoenig on inflation, I was

thinking that Edward R. Murrow said that anybody who isn't confused really doesn't understand the situation. [Laughter] I'm confused, and I don't understand the situation. I would like to report what I see, however. First, in terms of my District—in sharp contrast to the Twelfth District, because I think they are two extremes, or, say, Florida, in President Lockhart's District—employment growth has slowed. I mention this because last time I mentioned a data point, which is that within our District—actually in one state—year to date we may have created up to one-fifth of the jobs in this country. We were growing our employment base at 3.9 percent in the first quarter. We expected it to slow to 3.1 in the third quarter and then to slow down to the high 2s as we approached the end of the year. Housing prices in our District are appreciating, and we're benefiting from what we call the California diaspora—that is, particularly the techies and others, who are pushing up prices in Dallas and Austin. Finally, one point to bear in mind is wage pressure. Oil and gas extraction represents only 2 percent of the employment of Texas, despite how everybody stereotypes our state. Yet the wage index in that industry and the labor shortage are putting enormous pressure on skilled labor in other areas, and the overall wage index for our District is rising at the highest rate since January. Unemployment is down to 4.1 percent for our District. So like President Plosser, we are enjoying a relatively strong situation.

However, my views on policy are not governed by the outlier District that I inhabit, and I'd like just to give some anecdotal evidence, for what it is worth, since most of the information I was going to impart has been given by other thoughtful people at this table. First of all, on the growth side, my conversations with the CEO of MasterCard were quite detailed this month because I was following up on what I was hearing from retailers at different price points. He said that retail sales through November were up 6 percent year over year; taking out gasoline, 4 percent. He reported that most banks are expressing some concern about receivables growth in California, Florida,

Nevada, and Arizona. But elsewhere and at the largest issuers, as he put it, he does not see consumers running up their lines. I think this is in keeping with chart 4, the middle panel, in the Bluebook, which shows consumer credit fairly steady as you go through time and not significantly increasing. Second, the CEO of Wal-Mart USA—since you didn't mention Wal-Mart—feels a shift in view in that consumers, as he said with a terrible pun, have driven through \$3.00 gas—that is, they accept \$3.00 gas. The CEO of JCPenney, who reported before our last meeting that he felt that “the wheels were coming off the economy,” has sales 10 percent year over year to date through last Monday. As to Black Friday, yes, there was discounting on Black Friday. For JCPenney, their total volume was up almost 30 percent over their previous record year, and there is a sense in the retail industry that there may be a calming down between the two periods—the prolonged shopping period that you mentioned. Nonetheless, most of the retailers I speak to at different price points on the gross side are happier than they expected to be. Another phenomenon that seems to be occurring is an increase in confidence with regard to inventory management. That was best expressed by the CEO of Texas Instruments, who reported that, when we last met and actually during the summer, there was almost a freeze in terms of the willingness to build inventory and that their customers were not willing to think beyond thirty days. Now, having looked through the clouds that are presented on the financial front, which I'll address very briefly in a second, they see more willingness for ninety-day commitments.

On almost every other front, with the exception of the homebuilders, I haven't heard from my CEO contacts the negativism that, again, is reflected on the Wall Street side of the equation, with three exceptions. In terms of the airline industry, Southwest Airlines' overall volume is down 3.6 percent in the third quarter. It's pretty uniform across all Districts, including my own. We talked about trucks earlier. One of my contacts is the largest truck dealer in the country. He

estimates according to what he calls, if you'll forgive the expression, SWAG—which is “sophisticated, wild-assed guess.” I ask for the transcript to put the third letter in the third word as in a snake rather than the posterior. [Laughter] But the estimate of Class A truck sales, whether they're going to Russia or not, was 350,000 in '07. The original forecast for '08 was 280,000, and they now estimate 200,000. So there is a significant slackening on that front.

Finally, with regard to the housing market, you obviously don't want to talk to anybody in the homebuilding industry currently. But those with the strong balance sheets are taking advantage of weaknesses in certain areas, and I'll give you one data point that was startling. In the Sacramento, California, area, one of the large house builders just bought a fully developed set of lots that were priced at \$175,000 a lot and the going price was \$35,000 a lot. Significant deflation clearly is occurring in that sector—but also significant opportunity.

I'd like to address the inflation situation more thoroughly, Mr. Chairman. The CEO of Wal-Mart USA said that, for the first time in his career at that firm, they have approved a plan in which purchase costs will increase 3 percent in '08. He hadn't seen that before in his experience and said, “I'm totally used to deflation. Deflation is finished.” In terms of the suppliers to Wal-Mart, this was verified. I think on food prices we have to be extremely careful. Frito-Lay is seeking a 5½ percent price increase for next year. Wal-Mart has acquiesced. According to the CFO of that company, that's the highest rate in fifteen years. Kimberly-Clark and other paper producers, as I reported before, pushed through price increases. Procter & Gamble and others have followed. In terms of the energy situation—whether it is, as I mentioned before, Exxon or the large independents—they don't see much price relief other than what is the variable factor presented by the so-called city refiners.

Our own data at the Dallas Federal Reserve indicate on the international side that there has been some slackening as indicated in the Bluebook, but our work with JPMorgan and the index we're developing indicate that capacity remains very tight and that the tight capacity has added to fuel and food prices and may well explain why inflation in the euro zone, the United Kingdom, Japan, and other areas, including Canada, is higher than the benign trends they've been experiencing or are targeting in countries like Mexico. So on net, Mr. Chairman, from our perspective, I can't say I much agree with the Greenbook because I have different views about business investment—I'm hearing reports of significant cap-ex expansion—and, on the inflation front, I believe that we are understating inflationary pressures.

Now, very quickly on the comment that was made about conditions in financial markets having worsened: We hear this repeatedly. President Plosser mentioned price discovery. I think we have to be very, very careful to not overreact to what we see developing on Wall Street and to realize that there are benefits to price discovery. It is because of that price discovery that we're seeing a substitution effect, which I referenced in my questions earlier. It may be equity for debt, but it is restoring balance sheets, and reasonable prices obtain. I would argue that it is a healthier condition than, as I said earlier, living in the fantasy world where we were pricing things at ridiculous levels rather than realistic levels.

We'll come to the policy discussion shortly, but I would like to ask when we have that discussion what we are really buying with a fed funds rate cut—given the other mechanism that we're going to be putting forward and, very, very important, remembering as President Hoenig, President Plosser, and others have mentioned that we still have significant price pressures baked into the cake. Thank you, Mr. Chairman.



CHAIRMAN BERNANKE. Thank you. It's 10:30. It would be a good time to take a coffee break. Why don't we return at 10:50.

[Coffee break]

CHAIRMAN BERNANKE. Why don't we recommence. Vice Chairman.

VICE CHAIRMAN GEITHNER. Thank you. The outlook for real activity has deteriorated somewhat since our last meeting. In our modal forecast we now expect several quarters of growth below potential with real GDP for '08 a bit above 2 percent. The sources of the deterioration in the outlook for us are pretty much as outlined in the Greenbook. What separates us from the Greenbook still is about 40 or 50 basis points of different views on what potential growth is. Our view of the likely path of the output gap is similar. So as in the Greenbook, we expect a deeper contraction in housing activity and prices. We expect nominal and real income growth to slow more than we expected and consumer spending also to moderate more than we had anticipated. Part of that lower path of real spending is, of course, due to energy prices. We also expect the rate of growth in business fixed investment to slow a bit more than we had previously thought, and these changes are in part, but not solely, due to the expected effects of tighter financial conditions. For a given path of the nominal fed funds rate, they are tighter now than they otherwise would have been because of the fall in the estimated neutral rate. In our view, growth in the rest of the world will slow a bit, but along with the effects of the decline in the dollar, it will still provide enough pull for net exports to contribute positively to growth, offsetting part of, but just part of, the deceleration in domestic demand growth. Our forecast for core inflation is little changed. We expect the core PCE deflator to rise at a rate just under 2 percent over the forecast period.

Like many of you, we see considerable downside risks to the forecast for growth, and they have intensified since our last meeting. The Greenbook alternative scenarios on housing and the

credit crunch seem plausible, perhaps more likely to happen together than to happen independently, and I think reality is likely to fall somewhere between the baseline Greenbook scenario and these two darker alternatives. The risk to the inflation forecast still seems closer to balance in the forecast period. The higher forward curve of energy prices and the lower path of the dollar will raise headline inflation a bit and, in the near term, the core inflation path. But these pressures should be offset by the fall in anticipated pressure on resource utilization, not just here but also globally where the economies that have been growing above potential are likely to slow as monetary policy tightens.

I think it's important to recognize that breakevens in inflation at longer horizons have stayed relatively stable in the context of the fairly substantial move in the dollar, the fairly substantial move in actual and expected energy and commodity prices, and the very dramatic change in expectations of how the Fed is likely to respond to the change in the balance of risks to growth. In light of these changes to the outlook and the risks to the outlook, we've lowered our expected path for the fed funds rate. We now think it's likely that the Committee will reduce the target rate to 3.75 percent over the next few quarters, and this puts our real and our nominal fed funds rate assumption for '08 a bit under the new path in the Greenbook. We'd raise it back in '09. But our fed funds rate path is significantly above the market's estimate. As you've all recognized, conditions in markets have deteriorated substantially since our last meeting, but the basic dynamic is still the same. Actual and anticipated losses to financial institutions have risen as the prices of a large range of assets have fallen. Uncertainty over the path of housing prices in the real economy and complexity in valuing assets and structured financial instruments that are most exposed to those risks make it very hard for markets to know with confidence the likely dimension of total losses and who is most exposed to them.

Financial institutions have seen a sharp increase in their cost of funds, a substantial shortening in maturities at which they borrow, and a significant reduction in their ability to liquidate or borrow against their assets. Most banks have seen a very large and unanticipated expansion of their balance sheets as they've been forced or have chosen to provide funding in various forms. As banks and other financial institutions have moved to position themselves to deal with a more adverse economic and financial environment, they have become much more selective in how they use their liquidity and capital. The consequence of those actions is evident in the sharp increase in the cost of unsecured borrowing and the spreads on secured financing.

Now, it's important to recognize that, although a source of this pressure is concern about macroeconomic risk and its consequence for credit loss and asset values, the consequences of the adjustment by institutions to this new reality are very severe liquidity pressures in markets. These are particularly acute in Europe, and they are—at least in the market's expectations—likely to persist well beyond year-end. These pressures are the symptom of the underlying problem, as fever is the sign of the immune system's response to an infection. But just as high fevers can cause organ failure before the infection kills the body, illiquidity itself can threaten market functioning and the economy. The longer we live with these conditions—large spikes in demand for liquid risk-free assets, a general shortening of funding maturities, a limited amount of available financing even against high-quality collateral, the risk of substantial liquidation of financial assets, and the chances of runs on individual institutions' funds—the more we are vulnerable to a self-reinforcing adverse spiral that leads to a greater retrenchment in credit supply than fundamentals might otherwise suggest and with a greater effect on growth.

I don't think the past four to six months have been kind to those who have argued that this was just a mild and transitory bump. As in August, I think we have to be willing to treat both the

fever and the infection and, if you step back a second, the appropriate policy response to this set of challenges will entail a mix of measures. Monetary policy will probably have to be eased further to contain the risk of a more substantial and prolonged contraction in demand growth. I think we will probably need to continue to adjust our various liquidity instruments. We may need to encourage some institutions to raise more equity sooner than they otherwise might choose to do. We need to be very careful to avoid making both types of the classic errors in supervision in financial crises. These are, on the one hand, actions that would amplify the credit crunch by forcing banks to protect their ratios by selling more assets à la New England or, on the other hand, the commission of what you might call irresponsible forbearance à la Japan in the hopes of masking weakness and stretching out the pain. We also need to be careful to keep thinking through more adverse scenarios for the economy and the financial system and the policy responses that may be appropriate if they materialize.

The United States is, I think, a remarkably resilient economy still. Outside of housing, we don't have the same imbalance in inventories with the same degree of overinvestment in other parts of the economy that we have had going into past downturns. Corporate balance sheets still seem relatively healthy. The world economy is no doubt stronger. Current account imbalance is coming down. Our core institutions entered this adjustment period with a fair amount of capital. It is very encouraging to see so many of them start to raise capital so early. The financial infrastructure is more robust. Inflation expectations imply a fair degree of confidence in our ability to keep inflation low over time. The speed and the extent of the adjustment that we've seen in housing and by financial institutions to this new reality are really signs of health, of how well our system works. But we need to be cognizant that the market is torn between two quite plausible scenarios. In one, we just grow below potential for a given period of time as credit conditions adjust to this new

equilibrium; in the other, we have a deep and protracted recession driven as much by financial headwinds as by other fundamentals. There are good arguments for the former, the more benign scenario, but we need to set policy in a way that reduces the probability of the latter, the more adverse scenario. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. The outlook for economic activity has weakened over the intermeeting period. The housing bust looks steeper with importantly greater declines in prices, and that will affect future consumption. Weakness in housing and the uncovering of greater losses at key financial intermediaries have contributed to a notable deterioration in financial markets and a tightening of some financial conditions. We are also beginning to see signs that economic weakness has not been confined to the housing-related sectors. With regard to activity outside of housing, like many others who have spoken today, I see the most notable development as the flattening-out of consumption spending in September and October. That could reflect the rise in energy prices, but it seems to me that the very deep dip in consumer sentiment suggests that more is at work—that the actual and expected effects of financial market turmoil, for example, on the cost and availability of credit to households along with lower house and stock prices might also be contributing to less-ebullient consumption spending in the recent past and going forward.

Capital spending also seems to be slowing. Although business investment spending hasn't been revised down in the fourth quarter in the Greenbook, logically slower consumption growth will show through before long, as it does beginning in the first quarter in the Greenbook. In addition, we have some more evidence of greater business caution, which could damp business investment relative to expected activity. The NFIB survey for November, for example, shows that the outlook by small businesses deteriorated decidedly in November. There's a sharp downturn in almost all the

outlook indexes for small businesses in this November survey; and as I listen to the reports from around the table, I think for all except a swath of states from Nebraska through Texas, maybe the lower Midwest, I'm hearing a little more pessimism from other places around the country consistent with this. To be sure, employment continues to expand. Various purchasing manager surveys also suggest that activity continues to increase, albeit slowly. But I agree with the staff that, on balance, the incoming data suggest more near-term weakness than anticipated at our last meeting, including some tentative evidence of spillovers from housing.

Financial market conditions have deteriorated substantially, and that will place further restraint on growth next year. I think what we learned in the first few weeks of November was that losses are much larger than had been previously anticipated. Those losses stretched into what had been seen as higher quality mortgage-related assets, as Bill Dudley showed us, and the losses are large enough to call into question the ability of some very essential intermediaries to provide support for markets or to extend much additional credit. Those intermediaries include Fannie and Freddie and the financial guarantors, as well as some investment and commercial banks.

As concerns about downgrades and potential fire sales rose, investors and institutions moved to protect themselves, with the rise in term funding spreads symptomatic of the greater level of concern. It is logical and reasonable that the response of intermediaries to this concern would be to tighten terms and conditions for their loans to exert greater control over their balance sheets. Expectations that intermediaries will be tightening credit, along with the incoming spending data, led to a more pessimistic view of the economic outlook, and although Treasury rates fell substantially, concern about the performance of borrowers meant that those declines did not show through very much into the cost of funds to private lenders and borrowers. Indeed, a number of indicators point to a net tightening of credit conditions across a range of borrowing sources over the

intermeeting period, and that tightening will persist past the New Year. That tightening will have adverse implications for demand by households and businesses in 2008—that is, I do think there's going to be some spillover from Wall Street to Main Street. Forward measures of the LIBOR-OIS spread for after the year-end moved substantially higher. In effect, the cost to banks of funding will not reflect the full extent of the easing we've done in the federal funds market. The spreads on corporate bonds have widened sufficiently to actually increase borrowing costs for both investment-grade and junk-bond issuers over the intermeeting period. The leveraged-loan market deteriorated in late November, forcing banks to take more loans onto their balance sheets, using up scarce balance sheet room. Secondary markets for nonconforming mortgages remain moribund, with no signs of life, and any loans that will be made in these nonconforming sectors will be placed onto the balance sheets of thrifts and banks, many of which are already facing strains. Perhaps as a consequence, rates on prime jumbo mortgages have actually risen over the intermeeting period; Fannie and Freddie have increased fees and are tightening standards, and they face slightly higher spreads. So the damping effect of lower Treasury rates on the cost of conforming housing credit will be held down.

All that said, I do see some encouraging signs that the preconditions for future improvements are coming into place. As others have noted specifically, institutions are recognizing and dealing more directly with the implications of these losses. They are recognizing the losses more aggressively. They're raising capital, and they're being more explicit about taking contingent liabilities like SIVs onto their balance sheets. Even so, I think that what we have learned over the intermeeting period is that the process of returning financial markets to more normal functioning is going to take longer and the disruption to the cost and availability of credit will be greater than I had thought just six weeks ago.

Prospects for a period of weaker economic growth and reduced resource utilization do work to lower inflation risks. In addition, we've seen a downward revision to compensation and unit labor costs, and commodity prices outside food and energy have fallen substantially in recent weeks. At the same time, energy prices have risen, and past inflation data have been revised higher, and the staff has actually revised up its inflation forecast by a tenth or two over the next few years. So on balance, I judge the inflation risk still to be to the upside if the economy follows the modal forecast but by considerably less than I thought at the last meeting. I look forward to a discussion in the next part of the meeting about how we deal with the policy implications of this changing situation.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Like many of you, I think that the risks of bad economic outcomes are higher than they were when we met in October, both here in the United States and among our trading partners. The profound deterioration in financial markets—which in my view has changed significantly, more so than the data on the real economy—as been much discussed already. I'll make two separate observations about that deterioration now versus on the darkest days in August or September. First, we're seeing a very meaningful preference for Treasuries as opposed to agencies. In our discussions and in the data several months ago, they would have tended to be bundled together, but are putting more pressure on Treasuries in this current environment. Second, it strikes me that more overnight funding is being done by more large financial institutions, and that has to concern us as we talk in the next round about policy. Liquidity conditions have been hurt by several related factors, most of which speak to a lack of confidence. Certainly there are lower expectations about the macroeconomic environment and a lack of confidence in counterparties and in funding through year-end; but perhaps mostly, the escalating



risk aversion within the four walls of most, but not all, very large financial institutions has caused this market turmoil, both in the formal banking system and in what President Yellen described as the shadow banking system.

So why have these institutions lost faith and so much conviction? I'll give a few reasons. First, senior management instability. Second, a lack of confidence—by boards, senior managers who are still around, and the rest of their people—in the risk-management systems. There is a growing chasm of confidence between the boards—and those who are around them—about their stress tests and about their ability to withstand a series of shocks that could lead to further deterioration. There is also a very bad risk-reward tradeoff for those who are prepared or have been given some ability to put balance sheet capital to work. If they make a bet and it turns out to be very bad in this environment, their jobs and the jobs of many of their peers will be over. If they make a bet and it turns out to be as good as they expect, they won't be keeping much of the fruits of that trade. As a result, I think we are finding that key people across institutions—which President Fisher and others talked about as keen to provide opportunistic capital—have stepped back, I would say materially. Finally, it's not year-end pressures with respect to balance sheets that strike me as having the biggest effect here. It's that, as these managers are looking at their businesses for 2008, they're fundamentally having to ask themselves the questions about what businesses they are really in—whether they all should be originators, distributors, and holders of credit and risk or whether they need to go back to where they were five or six years ago, when they were picking their comparative advantages. As they look at the budgets for next year, I think they have a lot of understanding of what their cost structures are if they don't change their personnel, but they have very little clarity about what their top-line revenue will be. That has led to some serious questions about putting capital to work when you're really not sure what your core businesses are. I expect

that process not to be completed in weeks or months but really in quarters, and it's for that reason, among others—as Governor Kohn referenced—that I expect this period of relative strain to last for a while.

Let me raise a question that I asked at the last FOMC meeting. Are we seeing merely a change in the competitive landscape or a fundamental weakening across classes of financial institutions? I would say that today most large financial institutions, both money center commercial banks and large investment banks, are on the sidelines to some meaningful extent—unable or unwilling to put their balance sheets with any real force to work on new capital or on new projects. They're likely to be stuck there for a while. Surely there are a few large institutions with both capital and conviction that are opportunistically deploying capital with extremely compelling equity risk premiums. I think about that more as cherry-picking than any interest or ability of these institutions to buy the entire orchard. So they will be survivors, but they are being very, very careful.

Is there enough opportunistic credit from those institutions that distinguish themselves, along with classes of other institutions that we talked about today—large foreign banks, U.S. branches, super-regional banks, mid-sized banks, community banks, credit units, the GSEs, the Home Loan Banks—to pick up market share and take advantage of that slack that's been left for a period? I think in a word the answer is “no.” That is, they will inevitably pick up some market share during this period. This is good news for the institutions that had been crowded out by the money center banks invading some of these regions. But as I look at their own conviction, at their own balance sheets, and importantly, at where their source of credit might come from—from these same capital markets that are in dysfunction—I get encouraged that they can pick up some of the slack, but I wouldn't expect them to be able to pick up enough for us to avoid the spillover effect to

the real economy. It is true that many of these institutions now find business and new loans to be on better terms. They're price leaders rather than price takers. There is less competition for some of these new C&I loans and some of these new consumer loans. This is a good thing, but again, I wouldn't overemphasize that they are somehow going to be able to pick up the slack.

What about other forms of opportunistic capital, like sovereign wealth funds and hedge funds that are playing an important role in re-liquefying large banks? Again, I see that as part of a solution, but in my view, we're really still early in that process, and most of those institutions that are out looking for capital are likely to get more rounds of capital in the coming weeks, months, and quarters. The terms of the investment by some of these external funds suggest that this is not the final fund raising but really one of the first. In some ways, this is a much trickier position than if we saw one class of financial institutions that was weaker and thought that others could fill in. Again, the provision of credit normally made possible in this environment by the structured finance markets is affecting all financial intermediaries—the weak, the strong, the regulated, the unregulated, those on Wall Street, and those in other cities.

So what does the immediate future hold? Let me spend a moment breaking down a few classes of these institutions. Investment banks first. I expect most of them to be on the sidelines for a while. I expect the 2008 budgets, which are still coming together now, to likely suggest that they are exiting from some businesses and firing employees in larger numbers than markets expect right now. What about large money center commercial banks, particularly those that have been in the headlines? Obviously I would expect them, with some leadership clarity, to take a direction, but these businesses take a very long time to turn. So what will they do? They will continue to prune their balance sheets, continue to sell noncore assets and businesses, continue raising capital, and continue their discussions with rating agencies about meeting rating agencies' expectations. These

rating agencies want to be observers. They no longer want to be market makers or market participants, but I suspect they're going to find a reversion to the role of some years ago hard to pull off in this environment. What about super-regionals and community banks, which many of you spoke about with some view that their current balance sheets look okay? I think there is a sense of foreboding in that group about their commercial real estate exposures. Even though they are largely open for business, we shouldn't overstate their ability to pick up some slack. After all, the secondary market is closed for many of them. Their portfolio lending is up. The credit line utilizations are being fully tapped. Their own profit projections are likely to be coming down over 2008, and even though they certainly want to increase market share, they're reading the same headlines, and my own judgment is they're likely to be still somewhat worried.

In sum, these problems appear to me to have been long in the making—long before they struck the housing markets—and will be somewhat longer in the rebound than we might have thought even some weeks ago. The catalysts for improvement, though, are manifold. First, new leaders with dispassionate views are coming to many of these financial institutions and are willing to sell assets at prices that the leaders who brought them into different businesses might have been unwilling to do. Again, it strikes me that the ability to sell an entire book of business at a fixed dollar amount and run a competitive auction might help clear many of these prices that have otherwise looked pretty stubborn and pretty hard to mark. In terms of other validators that might be coming into these new investments, as I mentioned, I think the raising of equity funds is encouraging, but these validators, particularly those in the United States and some in sovereign wealth funds elsewhere, are pretty patient, and I don't see any of them thinking that they need to deploy their capital quickly or on terms with which they are uncomfortable because they will have an opportunity to look at tens and dozens more term sheets in the next several quarters. As many of

them are making investments now, they have a range of term sheets in front of them, and that judgment won't be rushed in their view. So the idea that it would be a panacea for the real economy strikes me as a bit overstated in the current environment.

So what about the real economy? No doubt the turmoil in financial markets, some of which was self-inflicted, has the potential to do more harm to the broader economy in the fourth quarter and in early next year. But we have to be humble about our understanding of that transmission mechanism. The preceding discussion strikes me as giving less comfort than I had at the last FOMC meeting on the short-term resilience and dynamism of our financial markets to repair themselves quickly. I'm still very optimistic over the forecast period and the medium term, but it puts more of a burden on the resilience and dynamism of our labor markets and more of a focus on the resilience and dynamism of our product markets and of our businesses. They do appear to be holding up okay. In my view, if you look at the various surveys that were referenced earlier today and the Business Roundtable survey of CEOs, these would be much more dire forecasts if we were in recession now than they appear to be at this moment. Most of these CEOs, who are not great at calling inflection points, still think that their business is okay. The economy has slowed; it is riskier; but it strikes me that we have a good shot of being able to follow through on the pattern outlined in the Greenbook.

Finally, just let me make a quick note about inflation risks. I think the inflation risks have garnered certainly less of my attention in this intermeeting period and might have garnered even somewhat less of the discussion around this table. The inflation risks that we saw six weeks ago strike me as not having improved very much. Inflation risks are quite real, and so as we are choosing our policy options, we have to keep these in mind. But we obviously have to take the

shorter-term risks and the illiquidity in the markets into account first and foremost as we think about both monetary policy and liquidity policy. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you. At the last meeting I expected a somewhat rougher patch, particularly in housing, than the last Greenbook scenario—a sort of slow-burn scenario, or something that Dave made reference to. But over just the past three weeks or so, the heat of that fire has become a lot greater than I had expected in terms of the burn that I'm seeing in the financial markets as well as in the real markets, particularly with respect to consumption, as many people have mentioned, and then more broadly just the reclosing of markets that had opened up. I described some of the markets and the turmoil, saying that things were in sort of a brittle circumstance. Unfortunately, I think in certain parts we're starting to see some cracks show.

I want to focus on thinking about banks' balance sheets and how that addresses some of the issues that we've talked about. For commercial and industrial lending, as many people said, there still seems to be reasonable robustness in the investment-grade corporate sector. Those guys haven't yet seen a lot of pressures in terms of increased cost of funding—not a reduced cost of funding but also not an increased cost of funding—just a slight increase in terms; but it's no problem for them to deal with those kinds of terms. They have the markets open to them both for long-term debt issuance and for intermediate-term debt issuance. They have bank funding that is available. Most of the banks, the large banks as well as smaller banks, are suggesting that, although they may be tightening standards somewhat, there is still a reasonable amount of credit demand and that most boards and executives are saying “continue to make those loans.” Firms' balance sheets are still quite strong. Firms have built up a lot of cash or liquid assets on their balance sheets over the past few years of profitability, so that part hasn't seen that much of a challenge. Some of the

increases that we've seen and measured on the books of banks in terms of their C&I portfolios are the taking on board of some leveraged loans on which they had made commitments a number of months ago; those commitments are now being drawn down, and so they're increasing their portfolios. So some of the increase in C&I lending is really just commitments that have come in earlier. The leveraged-lending market, which had opened up for syndication, has quite affirmatively closed once again. That's clearly a negative development.

With respect to SIVs, asset-backed commercial paper conduits, it seems that many of the banks are going it alone without waiting for the M-LEC. Virtually all major banks have announced programs for bringing asset-backed commercial paper or SIVs onto their balance sheets. So this is still orderly, but it's beginning to show some stress on the balance sheets with the leveraged lending and all of the SIVs coming on board, and this underscores the importance that a number of people mentioned about capital-raising efforts and ensuring that capital will be available, not just above the regulatory minimums but enough to make the market certifiers, the rating agencies, and others continue to feel comfortable.

A number of people have also mentioned that the flattening, and in some cases the downturn, in commercial real estate and the tightening of terms are of particular concern at the midsized and smaller banks. As you know, we had issued some guidelines a little more than a year ago on commercial real estate concentration and concerns about that because we had looked back to what happened during the savings and loan crisis and saw that we were starting to get banks into the same levels of concentration that we had seen back then that were associated with troubles. Although we had a lot of negative pushback at that time, I think that was not an unreasonable thing to do, but there are still a lot of challenges at those institutions.

Consumer lending is probably the area in which I've seen the greatest change, and it has raised my concerns the most. I'll hold off on mortgages for a moment. First, I talked with a very large provider of credit cards and other consumer products, HELOCs, mortgages, et cetera, who said that, since the report that I received just before the last FOMC meeting, when things were reasonably stable, they had seen significant deterioration. As some people have said, even though it has gone up sharply, the numbers are still reasonable, but it's the delta that concerns me, the very sharp deterioration that they're seeing. They're seeing this nationwide. The sharpest deterioration is, as a number of people have said, in the areas that have seen the greatest housing-price stress—California, Nevada, and Florida—but it's not limited to those. I won't go through all the details of what they told me on delinquency rates on different types of products, but nationwide they are seeing doubling, tripling, or quadrupling in those areas, and this is over a period of just six to eight weeks. So that's really quite significant and concerns me in combination with some of the lower numbers that we're seeing with respect to consumption.

Also, one of the phrases that they use is that they're now seeing "contagion in their book." So it's not just in one particular area but through a series of consumer products, and it's not just for subprime borrowers. They noted that one-third of the charge-offs had a credit score of over 700 at the origination of the mortgage. So it's far beyond just the subprime area. Obviously, as a number of people have said, the mortgage markets have really not reopened. There had been some hope around the last meeting that the jumbo market would reopen. We're seeing no evidence of that. The subprime market is not really open. The ABX indexes and other indexes are suggesting that markets are anticipating extremely high loss rates, even beyond what Bill was suggesting with the 15 percent loss. Now, I don't know whether those are reflecting just loss rates or whether other issues with respect to a lack of liquidity in the markets, or hedging that is going on, but still it's a



concern. As I mentioned last time, the Case-Shiller S&P index, although extremely thinly traded when you go out a year or two, is still suggesting potentially a 20 percent decline on average in the ten cities that they look at. So nothing has improved there, and given the tightness in the markets, given that we know that there will be more resets coming, given the continuing pressures, there's probably going to be a lot more downside potential for housing prices, and that, of course, could again feed into lower consumer spending. So that's the concern on the real side.

The concern on the financial side is that, obviously, all these things put a lot of pressure on bank balance sheets. Gathering capital is very important, but basically what we're seeing is a very, very slow revival of the markets, and I agree with many of the others who have said that it's going to take a while. A lot more information, model building, and hiring of people who can analyze these things will be needed. Something that was disheartening to me is that the Mortgage Bankers Association said that they hope by early next year to be able to provide sufficient information to the market so that people can really assess on a loan-by-loan basis what's in their CDOs, and that's a real concern. The information is simply not out there. So it's not just confidence or concerns. People are now looking carefully and saying, "I just don't have the information to be able to make an assessment." That's, of course, on top of the macroeconomic risk and uncertainty about housing prices in general. So I do think it's going to take a while for these markets to revive. As the Vice Chairman—actually both Vice Chairmen—and others mentioned, if you look into the forward markets for the OIS spread and other things, this is going to persist. This is not just an end-of-the-year problem.

People are looking to the banks for re-intermediation and for taking a lot of things on the balance sheets. That's going to continue to put a lot of pressure on the capital that they have, and I think there will be continuing uncertainty for both U.S. institutions and international institutions that

things have to keep coming on their books and they won't be able to get other things off their books. So that is a real challenge going forward.

Just a moment on inflation. I certainly am heartened, as many other people have said, that as expectations about our policy moves have changed, we haven't seen a significant uptick in inflation expectations, although by some survey measures we have seen some upticks. But real inflationary pressures are out there, and each incremental step we take with respect to policy easing potentially has higher and higher costs with respect to inflation. There are no free lunches here, but we do have to be mindful of the downside risk, particularly with respect to the banking and the financial system. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. You are all aware that I have a very optimistic personality; and at the last FOMC meeting, I actually had that kind of optimism. I felt that the economy was evolving in a quite reasonable way and, in fact, was responding to our policy changes in a way that I felt was very appropriate in order to minimize the cost of the financial destruction that we're experiencing. In particular, with the credit markets stabilized, we were in a situation in which our policy moves had reduced a lot of the macroeconomic risk that was out there in terms of credit spreads. Clearly we were still left with the opaqueness spreads or valuation risks that would require price discovery to resolve. It looked as though that was going to progress very slowly and over time we'd get out of the situation we were in and the economy would go through a solid rebalancing, moving away from some sectors that had too much going on—that is, housing—to sectors which we needed to expand—for example, the tradable sector—to deal with some of the global imbalances that we had. So I was actually feeling very positive. I felt that things were going exactly the way that I had hoped.

Of course, things don't always work out that way, and we started to see shortly after the October meeting a substantial deterioration in credit markets. My view is that the deterioration that we're seeing is appropriately reflected in the substantial revision to the forecast. I'm very comfortable with the way the staff has revised the forecast downward. It's obviously something that is an art because you have to do it in terms of add factors, but you do want to inform it by science, and I think they have appropriately done so in terms of thinking about what we've learned from past experiences that may tell us about how credit disruptions of this type will actually lead to lower spending in many categories.

But I want to talk about why my sunny disposition is much less sunny right now and why I'm actually very, very worried—not to say depressed, but at least a little more that way than usual. It is because I think that the kind of negative scenarios that are pointed out in the Greenbook are very real possibilities. In particular, there are two scenarios that they go into separately—the housing correction scenario and the credit crunch scenario. I think that there's a very strong possibility those would come together because, if housing prices go down more, that creates a much more serious problem in terms of valuation risk, and a serious problem in valuation risk will mean a further credit market disruption, which then can lead to more macroeconomic risk because it leads to this downward spiral. The real economy gets worse. That means that there is more uncertainty. Credit spreads get worse, and you get a very bad scenario happening. That could lead to the credit crunch scenario. Similarly, a credit crunch scenario, I think, would have a very negative effect on the real economy, which would mean that housing prices would go down, which would then make it much more likely that we have the greater housing correction scenario. So that's the first part of my depression.

The second issue is that the Greenbook does not go into the issue of what effect that might have overseas. There has been a lot of discussion in the media about decoupling the U.S. economy from foreign economies, and when it's just trade that's going on, I think that is usually completely reasonable. But when it's financial, then there is very good reason to think of recoupling because a financial disruption in the United States is very likely to spread to financial disruption abroad. We, of course, have already seen that. It's remarkable that what happened in the subprime sector has in some sectors affected European banks maybe even more than American banks. So the possibility that problems develop in the United States and lead to problems in Europe and other advanced countries and then those problems actually spill over back into the United States again means that there's a third scenario that could be all tied together.

When you look at all of this, I get very nervous. The bottom line is that my modal forecast is certainly down, very much along the lines of what the staff has suggested. But I think there is a significant probability that things will go south. You don't like to use the R word, but the probability of recession is, I think, nearing 50 percent, and that really worries me very much. I also think that there's even a possibility that a recession could be reasonably severe, though not a disaster. Luckily all of this has happened with an economy that was pretty strong and with banks having good balance sheets; otherwise it could really be a potential disaster. I don't see that, but I do see that there is substantial risk that the economy could have a severely negative hit to it that would be very, very problematic.

Now, when I look at the issue of inflation, I have a different view from many of the people at this table. I feel strongly that the one thing a central bank can never afford to do is to lose its nominal anchor. If we do that, it's a disaster. With that viewpoint, I should say that, if shocks occurred such that recession was going to occur and the only way we could stop a recession from

occurring was to inflate the economy, we couldn't allow that to happen. We actually have to preserve the nominal anchor because, in the long run, the pursuit of price stability is what makes good monetary policy and has been a key reason for the remarkable success of monetary policy by the central bankers throughout the world in recent years that I think nobody would have predicted. But when I look at what's going on in terms of inflation right now, I really do not see the substantial upside risk that a lot of people are talking about. For me the key driver of inflation is, as you know, inflation expectations. The question is whether inflation expectations are grounded, and I think the answer is "yes." In fact, we've had a situation in which higher energy prices have not led to any upward movement in expected inflation as far as I can tell. Neither has the dollar declined—that actually happened when the economy was doing much better.

Now we're facing a situation in which we have some substantial negative shocks to the economy, and those substantial negative shocks actually, if anything, put some downside risk in terms of inflation. I don't see that inflation will move much from 2 percent. One thing that has happened recently is that we have not seen some of the favorable inflation numbers. President Plosser talked about the fact that we've seen less favorable inflation numbers, but that's because we had temporary factors that were going to make inflation look overly good and drive it below 2 percent. The staff strongly indicated to us in the Greenbook and in past Greenbooks that those temporary factors were not going to persist. They got that one right, but there's no information from the fact that those temporary factors are no longer present that says that inflation pressures have actually heated up. Indeed, what we see is that inflation seems to be moving around 2 percent. That's where I think inflation expectations are grounded, and I see no tendency at all for things to get much worse in that regard. I'm not saying that couldn't change, and so I think we have to be very vigilant. But in the current environment, where I see a very negative potential path of the

economy, the idea that inflation is our primary concern right now is not where I am. With that let me end.

CHAIRMAN BERNANKE. Thank you, Governor. Well, again, thank you for a very helpful discussion. Let me just try to briefly summarize and then offer a few additional comments. Many participants obviously gave considerable attention to the resurgence of stresses in financial markets, including the increased losses by financial institutions, widening spreads, and poorly functioning markets. Some expressed concern that these developments were likely to result in tighter credit—not just in mortgages, where conditions are already tight, but in other areas as well—perhaps resulting in spillovers to the broader economy. A weakening economy could cause financial conditions to worsen further, leading to a negative feedback loop, and indeed, there are signs of some broader credit deterioration. Impending mortgage rate resets and foreclosures pose further risks. Some took these developments as increasing downside risk to growth, perhaps significantly. However, other participants noted some mitigating factors, including the fact that banks came into the situation with a lot of capital. Some institutions have raised capital. There's the possibility that other credit providers could take over from money center banks. Corporate balance sheets are strong. The credit problems have a regional focus in some cases, and there is a lack of effect so far on many on Main Street. Some also noted that the price discovery process was inevitable and needed.

With respect to the macroeconomic data, overall the incoming data were slightly weaker than expected, particularly in housing and consumption, although, again, the anecdotes were somewhat mixed. Fundamentals for consumption are weaker but not collapsing, with the labor market and perhaps wealth still providing some support and mixed information on retail sales. Differences across regions and products were noted. With the possible exception of commercial

real estate in some cases, investment is not yet much affected by credit conditions. Improvements in inventory management were cited as a positive. Unemployment remains low, and wage pressures exist in some areas, but they were less cited, I think it's fair to say, than in past meetings. Export demand related to the weaker dollar and strong foreign growth provides some help to the manufacturing sector, although it was noted that other countries might not be immune to a slowdown in U.S. growth. Overall, most participants saw slower growth, but there is greater agreement that the outlook is in any case more uncertain.

On inflation, some took a relatively benign view noting the restraint from a slowing economy and less tightness in labor markets. Others noted some recent increases in core inflation and continuing pressures from energy, food, and the dollar. Many stressed that stable inflation expectations cannot be taken as a given. Any comments or questions?

Let me just add a bit to the discussion because, as usual, it has already been very thorough. Again, if one looks at the incoming macro data, I think a fair judgment is that it was a little weaker than we expected. The economy has been a little slower than we expected. Housing data, consumption, and I would argue investment and production numbers were all somewhat lower than we thought was going to be the case at the end of October. I would also argue that, in particular, the consumer, who of course is crucial to the expansion, is facing somewhat weaker conditions—including higher oil prices, less wealth from lower stock and house prices, and perhaps tighter credit—than was the case a month and a half ago. I think it is noteworthy that the unexplained portion of consumer sentiment has declined considerably. There seem to be attitudes or, if you like, forecasts among consumers that are even weaker than would be suggested by some of the conditions they are currently seeing, and I think that is a concern.

Now, there have certainly been positive developments in the data. The labor market has held up pretty well. The unemployment rate actually dropped a bit last week. Stocks have come back a bit from their so-called correction, although I should say that this is conditional on a lot of expected easing by the Federal Reserve. ISM surveys show manufacturing as flat, but manufacturing is still growing, and there was a bit of good news yesterday in housing, with some slight indications of improved pending sales. I think it's interesting that the Michigan survey notes that prospective homebuyers are actually a bit upbeat because they see interest rates as low and prices as more favorable. So, again, the data suggest some weakness, but the story is not entirely unmixed.

So how would we interpret this? I think you could take a more sanguine view that we are seeing the continuation of a zigzag pattern that we've seen for quite a while. We had very weak growth in the first quarter of this year, for example; but even with the zero growth projected for the fourth quarter, we will see 2.2 percent growth in the first half of '07 and 2.5 percent growth in the second half of '07. So it could be that we're just seeing a zigzag pattern, and some of that is certainly true. It's also still true that a lot of the weakness we're seeing is in the housing sector. For example, for all of '07, growth excluding housing is about 3½ percent—so again, not suggestive of great weakness. Now, all of that being noted, I don't think I'd go quite as far as Governor Mishkin; I try to maintain an even keel here in my mood. [Laughter]

MR. KROSZNER. I believe David and his fellows can provide you with some pills.  
[Laughter]

CHAIRMAN BERNANKE. But I think I'm in the camp of those who see a fundamental softening going on here. One indicator is the pattern of final demand. This zigzag pattern has been mostly in a situation with basically about 2 percent growth in final demand but with quarter-to-



quarter variation in exports and inventories. We see in this case the opposite. Growth in private domestic final demand is projected by the Greenbook to fall to minus 0.2 percent in the fourth quarter and another minus 0.3 percent in the first quarter of next year. It does seem to have been a step-down in economic growth outside of housing.

The other issue is the financial markets, which so many people have commented on. I just note that there are several elements to this. First are the losses and the downgrades that have hit capital. These have been only partially offset by new capital issuances. In particular, we've seen about \$75 billion in write-downs or losses in the financial sector, of which \$45 billion has occurred since our last meeting, at a time when we thought things were clearing up. Criticized loans by our supervisors for the top fifty bank holding companies rose from 26 to 28 percent over the last quarter. So we're seeing continued losses, and I expect to see that to go forward. The second element of this is the pressure on balance sheets. Banks are taking off-balance-sheet assets onto the balance sheet. An example that Governor Kroszner mentioned is the leveraged-loan market, which was open for a while and now seems to be closed, and securitization markets remain closed.

Moreover, and I think this is particularly worrisome going forward, supervisors—and you all, of course, talk to your supervisors—are increasingly concerned about credit quality as it looks likely to evolve. Commercial real estate is one area in which we've seen essentially no defaults yet, but these things tend to lag, and there's a lot of expectation both among bankers and among supervisors of that sector weakening. One indicator of banks' views is that they have been raising their loan-loss provisions at a rapid rate, \$17 billion in the third quarter. It was at a twenty-year high, and we are certainly hearing from, for example, the Federal Advisory Council that they expect credit quality to continue to deteriorate. The result of this is that, although I do not expect insolvency or near insolvency among major financial institutions, they are certainly going to

become much more cautious, and I think that will affect their lending behavior and their willingness to extend new credit. As has been pointed out, some of the natural substitutes like the so-called shadow banking system are not really there at this point, and I would also be less sanguine than some about regional and community banks, which face their own problems: lack of securitization outlets and a lot of exposure to commercial real estate.

So I do think that we're going to see some tightening of credit and that it could get worse. Experience suggests that, while financial conditions are always different and the financial structure has changed significantly, credit crunches can have a big effect on the economy. The case that's been cited the most is the 1991-92 crunch, when the capital losses were pretty limited regionally but, nevertheless, there was a national impact. Another smaller, perhaps less relevant, example is the Carter credit controls in March 1980, which were very small in their aspiration yet somehow managed to create a short recession. So I believe that the financial conditions are going to be a significant drag. It is going to go on for a while. Given the low growth expectations, it could lead us into a negative growth area. I see realistically only one way in which we could avoid a drag from the financial system, which would be if, in fact, we get lucky and the housing market begins to stabilize and there's a sense that we've reached bottom there and house prices are stabilizing. I think that would do a tremendous amount of good for the financial system. It might lead to sufficient improvement as to avoid some of these consequences.

You know, I do think that we have to take note of the fact that the two-year government yield is down about 75 basis points in real terms since our last meeting and that five-year bond yields are down about 60 basis points in real terms. That's certainly a market view on what's happening to growth expectations, and it's not terribly inconsistent with some of the figures that come out of the Greenbook calculations. So obviously there are mixed views, but I think it is very

hard to argue that both the modal growth forecast and the rest of that output forecast have not shifted adversely.

With respect to inflation—again, people made these points as well—it is unfortunate that we do have some instability, some risks there. We saw some stabilization of the dollar over the past six weeks. That is obviously not exogenous. It depends on our behavior and our communication. I think oil prices depend also to some extent on our policy, directly or indirectly. We will be seeing some ugly near-term inflation numbers with oil price increases, which we hope will move out of the data shortly, but we're not sure. So obviously we have to watch that. I think there are a few things that are slightly helpful on that front. One is that, relative to the previous intermeeting period, there's more conviction now that other countries may be easing monetary policy. In fact, we've seen cuts in Canada and the United Kingdom. I think that takes a bit of the risk away from the dollar.

I do not know how big the impact of the national intelligence estimate about Iran will be, but it certainly reduces a bit the geopolitical risk that has been around oil over the past couple of years. But, of course, I agree with Governor Mishkin and many others that, whatever we might be tempted to do in terms of trying to get ahead of the financial conditions and what I fully believe will be ultimately a Main Street problem as well as a Wall Street problem, we need to be highly cognizant—this is not a ritual but an honest statement—of those implications for inflation expectations and the dollar as well. So let me stop there, just adding that I think the situation is very difficult and we need to recognize the uncertainty that we're facing. I believe that in response we will have to make sure that we are sufficiently flexible, open minded, willing to accept new evidence and new information, and willing to respond actively and quickly when we do get that new

information. Let me stop there, and let me now ask for volunteers—oh, sorry—before we do that, Brian will introduce the policy go-round.

MR. MADIGAN.<sup>2</sup> Thank you, Mr. Chairman. I will be referring to the draft announcement language in table 1, which is unchanged from the version distributed in the Bluebook and which is included in the package labeled “Material for FOMC Briefing on Monetary Policy Alternatives.” As shown in section 4 of the left-hand column, following the October meeting the Committee issued a statement that concluded that the upside risks to inflation roughly balanced the downside risks to growth, suggesting that the Committee saw reasonably good odds that, after 75 basis points of easing, the stance of policy would foster sustainable economic growth and price stability over time. As many of you have noted, however, events over the intermeeting period have undermined this view. The staff and the markets have interpreted incoming information as pointing to a distinctly weaker outlook for the economy. As Dave discussed, the staff has lowered its forecast for aggregate demand in light of deteriorating conditions in financial markets, incoming data on spending and output that were weaker than expected, and the higher path for energy prices suggested by futures markets. That weaker forecast for aggregate demand was reflected in a 70 basis point decline in the Greenbook-consistent measure of the equilibrium real federal funds rate, which placed it about 40 basis points below the current real federal funds rate. These developments have prompted the staff to tilt down its assumed trajectory for monetary policy, with a 25 basis point easing at this meeting and another ¼ point move in 2009. The assumed easing is not quite fast enough to offset the adverse shock to aggregate demand, and a small degree of economic slack consequently emerges over the next year or so that was not present in the October Greenbook. That slack can be seen as purposeful, as the staff has also interpreted incoming information as implying a modest adverse shock to aggregate supply: Recent inflation data and higher energy prices point to higher total and core inflation in the third and fourth quarters and, in the staff forecast, over the next few quarters as well. Given the restraint on inflation resulting from the projected emergence of modest slack, the staff judges that its assumed path for monetary policy will leave total inflation and core inflation, respectively, at the same 1.7 percent and 1.9 percent annual rates in 2009 that were projected in the October Greenbook.

Should the Committee find the staff forecast persuasive as a modal forecast, view that outcome as satisfactory, and see the risks around that projection, while perhaps larger than previously, as not sharply skewed in either direction, it might be inclined to ease policy by the quarter point assumed in the staff forecast and adopt a statement along the lines shown as alternative B in table 1. Like the staff, members might see the incoming evidence as suggesting that the outlook for real activity has weakened and perhaps that the downside risks to growth have increased. The deterioration in financial markets, in particular, might be a source not only of a downward revision to your outlook but also of a greater sense of uncertainty about prospects for aggregate demand. The financial system is dealing with significant

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

credit losses and resulting capital erosion and constrictions on balance sheet capacity. The eventual effect of those problems on the availability of credit to households and firms is unknown. In particular, the potential interactions of financial stress with real economic developments, especially those in the housing sector, are difficult to assess. In view of these considerations, as shown in section 2 the suggested rationale language for alternative B would state that economic growth is slowing; would cite softening in recent spending data; and would indicate that financial strains have increased in recent weeks. While the Committee may see significant downside risks to spending, it might also remain worried about the potential for an increase in inflation pressures and might view inflation risks as having risen a bit over the past six weeks. The recent inflation picture looks slightly less benign than it did earlier. Moreover, the increase in oil futures prices suggests that energy prices could continue to boost overall and core inflation. Members may also view downward pressure on the dollar as likely to persist. The language shown in section 3 would continue to cite the same concerns about inflation that the Committee has recognized in recent statements.

In circumstances of increased risks to growth and continued substantial inflation risks, the Committee might, as back in September, prefer not to express an overall assessment of the balance of risks. As shown in section 4, the Committee could say that “recent developments, including the deterioration in financial market conditions, have increased the uncertainty surrounding the outlook for economic growth and inflation.” However, if the Committee’s predilection is that further easing will probably be necessary but it still wishes to underscore its concern about inflation, you could insert a sentence after the first sentence in section 4 saying that “on balance, the Committee sees downside risks to growth as having increased, but it must also remain attentive to the upside pressures on inflation.” Most dealers expect you to couple a  $\frac{1}{4}$  point easing today with an assessment that the risks are skewed to the downside. But even the version without an explicit risk assessment probably would be read as consistent with further policy easing going forward, particularly since you eased in October following a statement in September that was comparable to the one shown in section 4. It might be worth noting that many market participants expect the Federal Reserve to augment its monetary policy action today with some announcement regarding the discount window—for example, a reduction in the primary credit spread. As the Chairman noted earlier today, the absence of such a reference in today’s announcement could prompt some investor disappointment; but given your monetary policy action under alternative B, the effect on market interest rates seems likely to be limited, and presumably, any effect today will be reversed tomorrow.

If the Committee is already persuaded that the economic outlook has weakened more sharply than in the Greenbook or if it has become significantly more concerned about the downside risks to growth, it might prefer the 50 basis point easing of alternative A. The Committee might see the larger move at this time as warranted particularly by risk-management considerations. The Greenbook presented two alternative scenarios—a “greater housing correction” and a “credit crunch”—that illustrate downside risks and suggest that the Committee may need to ease markedly

further over coming quarters. In the case of the credit crunch scenario, for example, the estimated version of the Taylor rule calls for a funds rate that troughs at 2.6 percent, well below the low point currently built into market interest rates. As shown in the second column, the language suggested for alternative A explicitly cites both a weaker outlook and greater downside risks in explaining the relatively large policy move. As in alternative B, the language on inflation would be nearly unchanged from that employed in October. But in section 4 of alternative A, the Committee would indicate a judgment that—following the further reduction in interest rates—the upside risks to inflation roughly balance the downside risks to growth. Or the risk language shown in red in section 4 of alternative B could instead be employed under alternative A; this might be appropriate if the Committee felt that the same elevated risks that motivated it to ease 50 basis points also suggested that it was difficult to weigh the remaining risks after the action. In either case, short- and intermediate-term market interest rates would likely decline noticeably under alternative A. In contemplating the pros and cons of alternative A, one consideration might be whether the Committee views this combination of sharp easing and the associated language, particularly the version coupled with an inconclusive risk assessment, as likely to lead market participants to worry about what information the Committee might have that would lead it to take such a substantial step, and so undermine investor confidence.

If, in contrast, the Committee saw the downside risks to growth as somewhat greater but was not yet convinced that the outlook had deteriorated substantially and remained concerned about inflation prospects, it might consider implementation of alternative C. As indicated in the right-hand column, under this alternative the Committee would maintain the stance of policy at this meeting but conclude that the downside risks to growth now are the predominant concern. With overall inflation on the high side and upward pressures stemming from energy prices and dollar depreciation, members might be concerned that policy easing could go too far. The stance of policy has already been eased 75 basis points despite only limited evidence to date that economic weakness is spreading to a significant degree beyond the housing sector. Indeed, as some of you suggested, the incoming indicators of slowing growth over the intermeeting period may be broadly in line with what you expected in October. If so, the Committee may feel that its monetary policy actions to date—and, at the margin, the establishment of the TAF as well as swap lines with foreign central banks—probably will provide sufficient insurance that financial problems will remain contained and will not greatly restrict the availability of credit to households and businesses. Thus members may believe that further easing is not and probably will not be necessary. Indeed, members may find worrisome the prescription of the optimal control simulation in the Bluebook that a slight degree of policy *firming* would be appropriate over coming quarters if the Committee were pursuing a 1½ percent long-run objective for inflation. Even with such unease about inflation prospects, though, the Committee may be sufficiently concerned about the current threat to growth to judge that, on balance, the risks are tilted to the downside with an unchanged stance of policy.

I will conclude by responding belatedly to a question that President Evans posed at the last meeting. He asked what the experience has been with including an indication of downside risks in the policy statement. In particular, would markets likely see such a risk assessment as signaling a likelihood of an imminent policy easing? Answering the question on the basis of the historical record is not entirely straightforward, partly because the Committee's practices have evolved over time; as President Evans noted, it has been only since 1999 that the Committee has released a risk assessment or some other form of a tilt along with its announcement. Despite some qualifications, the basic answer seems to be, not surprisingly, that the risk assessments have been predictive of future Committee action. The experience from December 2000 through January 2002 makes this point clearly. During that period, at fourteen meetings in a row the Committee indicated that "the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future." In eleven of those fourteen instances, that indication was followed by a policy easing at the next meeting. Later, toward the end of 2002, one of two indications of downside risk was followed by an easing, and in June 2003, a different balance of risks—one concerned with disinflation—was followed by an easing.

All in all, it seems reasonable to judge in current circumstances that maintaining the stance of policy while assessing that the risks are tilted to the downside, as under alternative C, would lead market participants to continue to put high odds on future policy easing. But the absence of policy action at this meeting despite nearly unanimous expectations of policy easing would mean that the expectation of a downtilt in rates would begin from a notably higher level and might be less steep, prompting a significant upward shift in short- and intermediate-term interest rates. That concludes my prepared remarks.

CHAIRMAN BERNANKE. Thank you very much. Questions for Brian? President Evans.

MR. EVANS. Brian, thank you very much for that answer. I have a clarifying question because I'm not quite sure I caught, in the way you talked about the economic risks in section 4 of alternative B, how they could be added. One thing that I wanted to ask about is that in section 2 there's no mention of downside economic risks. At least the five or six times I read it, I couldn't find it. That seems different from alternative C and alternative A, and also the October statement, at least in the balance of risk, mentioned downside risks to growth. Is there a particular message that we're thinking about sending with that? I guess part of the question is that, without some mention of expected slowing, are we maybe undercutting our November forecast that we published? It seems natural that there would be some discussion about how things have slowed relative to what

we were expecting. I mean, that might be one way that those forecasts would be interpreted and used. But I lay that out as a question.

MR. MADIGAN. President Evans, in response to your first question, the suggestion for section 4 of alternative B would be to add after the “Recent developments...” sentence, “On balance, the Committee sees downside risks to growth as having increased, but it must also remain attentive to the upside pressures on inflation.” With regard to your other question, I think that characterizing whether the slowing in economic growth right now is what you anticipated may be a little difficult. It is relatively early in terms of the information that’s available for the fourth quarter, so it may be difficult to pin that down very precisely.

CHAIRMAN BERNANKE. Any other questions? All right. President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. Weakness in economic data reported since the last meeting, continued financial turmoil, and a forecast that places us uncomfortably close to a recession calls for action, and my strong preference is for the decisive action reflected in alternative A. With well-anchored inflation expectations and the possibility of unemployment rising above our estimate of the NAIRU, the risks to inflation from this action seem quite low. However, the possibility that the economy will soon be in a recession is too high, and our action should be significant enough to substantially reduce that risk.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. With respect to policy, I also favor alternative A, a 50 basis point rate cut. Let me explain my reasoning. Otherwise I certainly agree with what President Rosengren said. First, I think the equilibrium real rate of interest is low relative to its long-run average. The range of medium-run measures of  $r^*$  reported in the Bluebook is between 1.8 and 2.3 percent, and this range includes the Greenbook-consistent measure and the



staff's Kalman filter model estimate of 2.1 percent. Market perceptions of future real interest rates are also very low, with yields on five-year Treasury inflation-indexed bonds now below 1¼ percent. I think the headwinds from financial market turmoil and the more general reassessment of risks that is taking place in global markets are good reasons why the equilibrium real rate may be low in the current situation. We do have historical precedence for this. For example, Kalman filter estimates of  $r^*$  fell noticeably during the credit crunch of the early 1990s.

Given the current state of the economy with inflation near a level consistent with price stability and resource utilization near its equilibrium level, policy should be close to neutral, which implies a nominal funds rate of 4 to 4¼ percent. The forecast and risk assessment must also enter the analysis. With an assumed 25 basis point cut at this meeting, the Greenbook foresees the economy barely skirting a recession, so any more bad news could put us over the edge; and the possibility of getting bad news—in particular, a significant credit crunch—seems far from remote. To my mind, the risk to the forecast and the risk of a vicious cycle, in which deteriorating financial conditions and a weakening economy and house prices feed on each other, argue for adopting a risk-management strategy that, at the very minimum, moves our policy stance to the low end of neutral—namely, a cut of 50 basis points—and I think it argues for doing so now rather than taking a “wait and see” approach and lowering it only grudgingly. This may not be enough to avoid a recession—we may soon need outright accommodation—but it would at least help cushion the blow and lessen the risk of a prolonged downturn. I should also say that my recommendation assumes that the implementation of the TAF, even if it succeeds in improving liquidity in the money market, will not appreciably alleviate macroeconomic conditions.

Regardless of the policy actions taken at this meeting, I think we need to be very careful in these unsettled conditions about how we communicate our assessment of risks and likely future

policy actions. We should maintain maximum flexibility so that our future actions can, in Governor Kohn's well-chosen words, be nimble. If the Committee chooses to cut the funds rate 50 points, I would favor the assessment of risks from section 4, alternative B, in table 1. This appropriately leaves open what the future policy will be and stresses that it depends on developments. If the Committee goes with the 25 basis point cut, then I would support using the assessment of risks from section 4, alternative C, which states clearly that the predominant concern is the downside risk to growth. Otherwise I fear that market participants may mark up their expected path for policy over the next year, leading to further erosion in financial conditions. Finally, I would suggest that, given the long period of time between today and the next FOMC meeting, we be open to the possibility of a special intermeeting videoconference to assess economic and financial developments, and this meeting could also benefit from an assessment of the effects of the TAF once it's in place.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. I favor a  $\frac{1}{4}$  point reduction in the funds rate and the language of alternative B. Perhaps more than usual I think it is important to preserve some flexibility now to respond to incoming information. I would not be surprised if we want to reduce the funds rate another  $\frac{1}{4}$  point at the end of January, but I don't want to send a signal that would encourage market participants to presume another cut then. So I guess I am in the "grudgingly" camp to which President Yellen referred. Besides, I would welcome a permanent move away from the balance-of-risk-assessment machinery. I do believe we face a good-sized risk of things unraveling and substantially weaker growth in the near term. But my sense is that the risk just isn't large enough to make me want to support 50 basis points now. While I wouldn't be surprised with a January rate cut, I don't think it should be a foregone conclusion. I think we need to be more deliberate about such actions as we go forward. The magnitude of the

fallout from our mortgage problems could be substantially clearer in the first half of next year. If the fallout turns out to be smaller and more manageable than we fear, the downside risks to growth prospects could dissipate, even though we still would be working through a bulge of mortgage resets and defaults.

Some of us have given a warning that we may need to reverse course promptly and raise rates should conditions improve. You know, it is always attractive to comfort ourselves as we cut interest rates and to promise ourselves that we are willing to do so, but there always seems to be a reluctance to start a sequence of funds rate increases after a series of rate cuts. The usual thing is a fear of sort of an exaggerated reaction in the yield curve. These pressures are likely to be especially acute if, when the time comes, we are still in the midst of significant distress among subprime mortgage borrowers and the housing market. That seems likely. So I think we need to be realistic about prospects for reversing field. To the extent that such pressures would be hard to resist—and I think they would be—we should be very cautious, more cautious than we otherwise would be, about lowering rates.

Another reason to be cautious is that overall inflation is well above our targets. As David Stockton pointed out, we have a record of forecasts for food and energy prices based on futures market prices coming in too optimistic over the past several years. I think we need to be concerned about that. I am concerned that market participants might have come to believe that we have placed our concerns about inflation entirely on hold for the duration of the housing market difficulties we face. Such a lexicographic reaction function is what led to the stop-go policy pattern in the pre-1979 era. So I believe it would be a mistake to take our eyes entirely off inflation right now. I am doubtful that a forceful restatement of our assessment of upside inflation risk will be very effective in that regard. We have been doing that, and I think it is

falling on increasingly deaf ears. I think that we may come to believe that action is required to back up that sentiment. If inflation drifts up or overall inflation doesn't come down, I think we need to be prepared to respond to real weakness less than we otherwise would have before.

Thank you.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I would say that when Governor Mishkin talked about the importance of maintaining long-anchored expectations about inflation, I agreed with that. I think that is more vulnerable than others do, and so if it were on the table, I would support maintaining the rate. I think inflation risks are elevated. I am uneasy about lowering rates into a rising inflation environment, and I think we should have allowed more time for the 75 basis points to work. Having said that, however, I also acknowledge that the downside risk to growth may be larger than I judge it to be. There is a lot of evidence out there right now, and I have heard it from around the table. Thus, I can accept the 25 basis point cut, if that is the Committee's preferred action. I would be very uneasy with a 50 basis point cut at this time, and I do not think a 50 basis point cut is warranted in conjunction with tomorrow's announcement of a term auction facility. I think that would send a signal to financial markets that we view the outlook as more dire than it is, thus adding to financial turmoil rather than alleviating it. So I ask the Committee to keep that very carefully in mind as we go forward with this discussion. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Hoenig, did you have a view on the statement?

MR. HOENIG. I do. Turning to the statement, I think the language in alternative B is the right language, regardless of which—A, B, or C—we choose. I think in particular I would

prefer that we not assess a balance of risk and instead simply state that recent events have increased the uncertainty on output and inflation. Thank you.

CHAIRMAN BERNANKE. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I favor alternative B, including the language, and let me outline how I get there. First, I think that it is important to recognize that the Greenbook outlook already takes account, as best we can or as best the staff can, of a lot of the dismal financial news that is out there. There is a probability distribution around that. We don't want to double-count the financial distress. It is already in the baseline forecast, and we don't want to think of all the weight of the financial distress effect as being down from there. So there could be an outcome that is certainly stronger than the Greenbook outcome. In fact, I think it is true historically, if you look at forecast accuracy, any forecaster, including the Greenbook staff, does not have a standard error all that much below a very naïve outlook that just says that GDP will grow at potential. So I believe that there is genuine weight above the Greenbook forecast in the probability distribution, and I think the Greenbook forecast is a very good baseline for our discussion. Second, clearly, should the unemployment rate rise significantly, credit problems are likely to multiply rapidly. We could have a great deal of distress that would accumulate, possibly very quickly. On the other side, should the nonhousing sectors prove more resilient than the Greenbook forecast, we could be faced by upside surprises, especially on inflation. Certainly, I would come down hard on the side that following a policy that temporizes on inflation only builds in a much deeper problem in the future, and it is better to take the medicine early, if necessary, to deal with inflation.

I would also note that, over next year, there will be an increasingly high bar on any change in the federal funds target. There is an election in November. I have tremendous

confidence in the nonpolitical outlook of every single member of the Committee, every single participant; indeed it is a very deep part of the culture of the institution. Nevertheless, there are tricky issues involved with maintaining the appearance of impartiality, and I think historically during an election year there is a strong presumption to try to stay as low key as possible. The way you do that is not change the fed funds rate target at all unless there is a really good case, and that is increasingly true as you come up to the November election. So as we go through the year, there is going to be an increasingly high bar, it seems to me, and if we overshoot on the easing side, it may be difficult to come back until '09. I think that every cut is likely to be permanent through next year in any event. That tells me that we should pursue a strategy—I say “we,” but it is more “you” because the next meeting is my last.

MR. MISHKIN. You will be sailing.

MR. POOLE. Not quite after that meeting. It is still a little cold. [Laughter] But my instinct is that we have demonstrated a willingness to act decisively when there is a very good case in the data. So if data come in with very bad employment reports, additional financial distress, and all of that, I don't think there is any question that the market will then anticipate decisive action. That wasn't so true back in August, by the way, but the fact that there was a 50 basis point move in September has conditioned the market to respond differently. I would be in favor of a strategy that says at this point, if we indeed go down another 25 basis points, we will have cut the target by 100—a strategy that is very open but in a sense follows the market. Now, if it turns out that we have a lot of weak news in the weeks ahead, the market is going to build in further rate cuts. It will do a lot of the work for us without our having to be out front. You will get the benefits brought forward because the market is going to bid those in, and

therefore, I think a strategy that tries to follow the data, to demonstrate a clear willingness to respond to the incoming information, gives us the best chance for stability over the coming year.

Despite the memo that I distributed, which I think was an option that we should consider, I think that we should not have any balance of risks view because it is highly desirable to leave everything very open. Meeting by meeting, we, or you, will have to decide whether the case is being made from the data. Of course, I think that the speeches and other communication will be very important to try to explain the strategy and the process by which we assess and respond to the data, maintaining always a longer-term view and not getting carried away with the most recent observations. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support the action and language of alternative B. I think rates are too high right now to support the economy's remaining near full employment and higher than they need to be to contain inflation. When we left the meeting last time, we thought we might be where we needed to be, but that was premised on a lack of spillovers outside the housing sector and improving financial markets, and both of those have proven not to be the case. So I think we need to move. How much is a tough question. If we were to do 25, we would still have restrictive policy based on the staff forecast because 25 basis points moves the unemployment rate above full employment. So it is still on the restrictive side, even with 25 in the Greenbook. Of course, we would be outrageously tight relative to the markets' expectations of what we need to do. So I think 25 basis points still leaves us a little on the tight side, and I suspect we will have to do more over time. But I am comfortable doing 25 at this meeting.

There is just a huge amount of uncertainty about how the financial markets are evolving, especially before the end of the year. I think we will have a little better sense of what the net deterioration is when we get past the year-end, into January, and see what effect, if any, our auction facility has. Some of the signs we have had in the incoming data haven't been that negative—the employment report—which is a really key report, and the fact that there is continued growth in employment gives me a little reassurance that we are not in some huge downdraft in the market and that we don't need to move that aggressively. We do have high headline inflation that we are looking at and some inflation risk. So I think at this point that 25 basis points would send a signal that the Federal Reserve is awake and on the job, and I would stick with language that gives us maximum flexibility, which I think alternative B, section 4, does. President Fisher asked, “What would a decline in the federal funds rate do?” I think it would do quite a bit. It doesn't address those losses directly, I agree. But I think it would offset some of the tightening in financial conditions or would move in that direction. It would help asset prices. I also asked myself when you asked that question, President Fisher, what would happen if we didn't lower rates. I think we would have much tighter financial conditions in the market adding to what is already a distressed situation. So I really think that the 25 will be beneficial. A lot of people around the table have said—and President Evans raised the question about whether there are some downside risks—that somehow we could express something more in the statement. I wouldn't object, Mr. Chairman, if someone found some language to put a little more sense of downside risks about the outlook somewhere in the alternative B statement. Thank you.

CHAIRMAN BERNANKE. Thank you. President Stern.



MR. STERN. Thank you, Mr. Chairman. Well, I think we clearly should be reducing the federal funds rate at this point. While I think it is a close call, I guess I would come out with doing a quarter at this meeting. Basically, I get there by just trying to weigh the risks. I think the principal risk is the dysfunction in financial markets and what that could imply prospectively for the performance of the economy. I think that is the basic case for taking action now. I think the risks are asymmetric. I don't see the same risk to the near or intermediate term in terms of inflation outlook. Yes, we may get some high headline numbers, but we hope at least that those will dissipate rather quickly. So that is where I come out.

I would support the language under alternative B. Just to add one thought on that: You know, last time we tried to characterize the balance of risk, and I don't think it turned out to be persuasive. We would do well to be very, very cautious at this point. Obviously, there is a lot of uncertainty out there, and at this point, discretion is the better part of valor.

CHAIRMAN BERNANKE. Rules versus discretion. [Laughter] Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. In the last two meetings, the Committee cut the funds rate 75 basis points. We did so because the outlook for the economy has clearly deteriorated relative to our views in early August. We have argued that we have been acting preemptively to help forestall and to mitigate potential fallout from the deteriorating housing market and financial disruptions. How successful have those rate cuts been? I think it is too early to tell. It is still true that the effects of monetary policy on the broader economy—especially on spending, output, and employment—operate with a considerable lag. It is my guess that our previous cuts or anything we do today will not have measurable effects on the broader economy in terms of spending and output until late in the first quarter of next year and

more likely in the second and third quarters. So I don't think anything we do today will have an appreciable effect, if any, on the economy's first-quarter performance. Thus, one's view about the future path of the economy during the second half of '08 depends critically on what you think the effect of our decisions will be going forward. Now, contrary to what some may think, I am not immune to the drum beat of downbeat news that we have heard. I am keenly aware of the concerns expressed around this table and by others who are more concerned and anticipate a much more prolonged period of reduced growth. I have marked down my forecast for the first half of '08, but my view of the second half has not changed very much. Thus, while I am okay with the 25 basis point cut at this meeting, I would like to highlight that there are risks to that decision. I would oppose a 50 basis point cut.

As suggested in my earlier remarks, I do think that there are increasing underlying inflation pressures, and although we have not seen inflationary expectations change very much in the data, I do think they are fragile. Before I stop, I would just like to give one example of that concern. In the last Philadelphia Fed Survey of Professional Forecasters, conducted in early November, we asked a special question. We asked panelists whether they believe that the FOMC has an inflation target. About half the survey respondents said that they believe the FOMC has an inflation target, and of those, close to 90 percent responded that they thought our target was for core PCE inflation. They also provided their views on what the target was. The median estimate of that target was between 1.6 and 1.7 percent. Among these forecasters, almost all those who thought that we had a target also indicated that their long-term—that is, their ten-year—forecast of PCE core inflation was systematically 50 basis points,  $\frac{1}{2}$  percentage point, higher than what they thought our target must be. We asked the forecasters, if their forecast was different from the target, why it was. Almost all the forecasters presented a variation on a very

similar theme. Many of them said, “Well, the Fed really has goals other than inflation,” or “they wouldn’t stick to it,” or “they would find it painful and, therefore, not commit to the goal,” or “they lacked credibility.” Now, this is a small subsample of people. Nevertheless, I find it interesting that these professional forecasters are really not terribly sure about our commitment to price stability. The issue is not what they thought the target was per se but what the differential between their forecast and the target was.

Finally, just regarding language, I have been uncomfortable for some time with the practice of summarizing the balance of risks, and I share President Lacker’s concern in that I would like to get rid of it. So I would support alternative B with the language. I will also reiterate the point that, while we may be making ourselves feel better, the fact is that we need to be prepared to act quickly if things reverse themselves and we have to reverse the rate cuts. I agree with that. On the other hand, I think the history of this institution is such that it is in fact more difficult to do than it is to say, so I think we need to have some caution. So I favor alternative B and the language as expressed. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. As I listened to the first go-round comments, I charted everyone in a quadrant chart with high risk to growth and benign inflation in the upper left-hand corner. Then, I had of course three other squares or quadrants, and so far I am seven for eight listening to the remarks. So maybe this predictive power has some influence or some spillover into how I come out on this. I don’t suppose 37½ would fly. [Laughter] You know, on balance I find myself in the upper left-hand quadrant, more concerned about downside risk to the economy and viewing, at least for the present, inflation as a relatively benign consideration. So given my sense of the downside risks and the uncertainty that is associated

with the financial markets, my recommendation is 50 basis points at this meeting, and my preference is to remain, as much as possible, agnostic on the January action. I take note from the advice I get from some of my own staff that Taylor rule projections suggest that the medium-term nominal equilibrium rate is about 4 percent, and 4 percent comes the closest to being the likely neutral rate. It is relatively likely that incoming data will suggest that a cumulative cut of at least 50 basis points is warranted by the end of January. So in my view, moving to that rate now is really the most prudential. In some respects, that is the most conservative and risk-attentive policy. I continue to adhere to the risk-management perspective in dealing with our challenges, and continuing to take out insurance against extreme downside scenarios seems correct to me. Notwithstanding the view that the Fed is, and should be, reluctant to take back a rate cut, I prefer facing up to that difficult decision possibly next spring to undershooting the needs of the situation and potentially compounding the problems. So I don't see a lot to be gained from an incremental approach of 25 basis point cuts. It has been argued with much validity that overnight liquidity isn't really the problem and won't cure the information gaps that beset the market. But I would argue that, given the profoundly unsettled state of the financial markets, erring on the side of more-aggressive action provides some insurance against continuing liquidity seizures. To the extent that psychology and confidence matter—and I think they matter a great deal in these circumstances—it is on its face a stronger message.

Regarding the statement, I actually prefer alternative B. I think the finessing, if you will, of the balance of risks and its mention of increased uncertainty come closest to my views. So I suggest consideration of the thrust of alternative B, possibly with the insertion that Brian mentioned, connected to a 50 basis point policy action. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, I don't think I could have said it better than Governor Kohn said it. I am on his wavelength. I would just add a couple of things that I would suggest we consider. First of all, with regard to the financial situation, which is obviously driving this conversation, I appreciate the medical pathology that the Vice Chairman suggested. We have gone now from cardiology, which is my thing, to this fever and the fever breaking, and so on. I combine it with a bit of the strawman that Governor Warsh raised. No one has suggested a panacea. No one has suggested that the existing pool of ersatz money, outside money, or shadow money is fully sufficient to relieve the stress the system is under. What has changed, however, since the August crisis is the process of price discovery. We are beginning to actually get realistic pricing. I spent twenty-one years buying distressed assets on Wall Street. I think I understand the process. It is a patient process, and it takes time. But I think that is the only difference. We have begun the process; it has a long way to go. We have enormous risks, and I fully agree with Vice Chairman Geithner that there is significant risk that might stem from this. But let's not also understate the fact that some adjustment has begun and that is good news.

I would suggest 25 basis points, Mr. Chairman, because I think we have to be very wary of shooting an entire bolt here. If we do 50 basis points plus the TAF plus the swap lines—this is all very subjective—my opinion is that we would scare the hell out of the markets. There is a significant risk if we send a signal, as was previously said—I think Brian may have said this—that we have information that other people do not have. President Lockhart referred to delicate psychology. From a risk-management standpoint, I think the psychology is the opposite of what he stated, which is that we are at risk of interfering with the beginning of the adjustment process that I just described. If people feel that we know more than they do, that we have greater fear of the downside, you are going to see a delay in that adjustment. They are wanting to step up and

cherry-pick a little before you start going through the whole orchard. So those would be the two factors that I would suggest. I want to come back to the last point. Our job is to keep inflation at bay. The nominal anchor you mentioned is critical. I heard more people speak around this table about being worried about inflation than did not so speak.

And a second-to-the-last point. I agree with President Poole and the suggestion of, I think, Charlie Plosser. I would like to be like the Reserve Bank of Australia and raise the rates despite the political election, if we had to. But I think the scrutiny of this institution will be intense, and my preferred mode is just to stay out of the way. I think it is politically very brave and possibly foolish to say that, well, if we do too much here, we can always pull it back. There will be a lot different circumstances next year, and I worry that we may do too much. I would be against 50 basis points. I would be in favor of 25 basis points, and I would be in favor of alternative B as stated, if I had a vote. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. I favor a  $\frac{1}{4}$  point reduction in the fed funds rate today. As I noted earlier, assuming some ease in policy, my forecast is that the economy will experience subpar growth stretching into the middle of 2008 but then recover as we move into 2009 and that inflation will remain contained. Our forecast assumes that the disruptions in financial markets will generate more-restrictive credit conditions for consumers and businesses than we have seen to date, though not to the degree assumed in the Greenbook baseline. In light of my outlook, I think that policy should be somewhat accommodative; and given that I think the long-run neutral nominal funds rate is somewhere around  $4\frac{1}{2}$  to  $4\frac{3}{4}$  percent, I support further easing. Given our expectations of coming financial restraint, there is a good chance that we will

ultimately want to reduce the funds rate 50 basis points, but I prefer to go slower than that and move down only 25 basis points today.

The slowing in consumption that we have recently seen reflects only a couple of months of data that followed quite strong growth during the summer, and much of that softening may reflect the transitory jump in gasoline prices. So I don't think it is clear that we have seen a real change in the trajectory of consumption. I think the degree of financial spillover built into the Greenbook baseline is a plausible scenario, but we have not seen such spillover yet. The pessimistic view is a very forward-looking one, and I applaud forward-looking thinking. I am not quite there yet, but that is definitely a risk. I hesitate to say that we will know more next meeting because it is such an obvious thing to say, but I definitely agree with Governor Kohn that by the end of January we will at least have a better idea of how the TAF funding went and how much of the recent increase in liquidity demand and related disruptions are transitory end-of-year problems as opposed to more-fundamental problems that would impinge dramatically on credit conditions for nonfinancial borrowers. We will also know more about the actual strength of consumption and investment. Another concern I have about a 50 basis point move today is that the public might see it as an indication that we have read the incoming news more negatively than I at least think we should have, so I agree with Presidents Hoenig and Fisher on that. This would have negative implications for the already fragile state of consumer and market sentiment. But from here to a 4 percent fed funds rate, I think that the inflation risks are acceptable. Beyond that, I think it depends importantly on inflation developments and also developments in the economy.

In terms of the statement, I prefer alternative B. I like the additional sentence that Brian was suggesting in section 4 for the balance of risks. But however that comes out, in reading

section 2, when I was asking the question, it just seemed to me natural that after “incoming information suggests that economic growth is slowing” something like “somewhat more than previously expected” might be helpful, but nobody else has really mentioned that, and I am okay with that.

Finally, on the political concerns, my memory is that we raised the funds rate during the 2000 and 2004 elections, so I am not really concerned about that, although people will wonder. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I favor a 25 basis point cut in our fed funds rate target and the language in alternative B. More losses at financial companies, in combination with uncertain year-end funding pressures, obviously have unsettled financial markets again. As I said earlier, sentiment about business conditions next year have become considerably more pessimistic in the past few weeks. In this environment, leaning toward caution and providing the added short-term liquidity that markets appear to need makes sense to me. Although I can see the arguments for a 50 basis point adjustment in our policy rate, I am inclined to think that a lesser policy response is called for.

As others have indicated, it may be that a 25 basis point action is going to prove to be insufficient, and another cut might be necessary. But I am also mindful that efforts to address the problems that are affecting the real economy have the potential to aggravate inflation expectations. Indeed, by some cuts of the TIPS data and from a few reports that I am receiving from business contacts about rising commodity prices and rising import prices, inflation expectations may be tugging on their anchor just a bit. Given these considerable uncertainties, I think smaller moves are preferable to larger ones. At this time, I simply can't assess with any



useful precision how to weigh the risks we face, only that the risks we face are very difficult. Consequently, I favor the language expressed in alternative B as it is currently written. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. I support alternative B as is. Without monetary policy action, it does strike me that the harm to the real economy could be larger and longer than otherwise. Similarly, I would say that without employing the liquidity tools that we discussed when we met by videoconference, monetary policy may well be insufficient to bring about real improvement over a reasonable period of time. So I like the combination as a very useful, natural experiment to help us figure out what the diagnosis of the patient really is. It does concern me that, if we go with 50 basis points today along with the TAF, the swap, and other actions, it would be harder to disentangle what exactly ails these markets, which is some combination of capital and liquidity.

With respect to the question of how much—again, back to the 25 or 50 basis point move—it strikes me at least that this is a very hard time for us to be evaluating what the equilibrium fed funds rate is. If policy is a function of both the fed funds rate target and what is going on and how capital markets are reading and processing that information, these markets are in a period of incredible dysfunction. That suggests to me that we should go slower and be more cautious in trying to get to equilibrium. It is easier to assess that when markets are functioning at levels that are superior to where they are functioning now, and I hope by the time we meet next that the markets will be giving us a clearer read, so we can approach equilibrium or at least understand it better.

Finally, with respect to some of the discussion around alternative B, section 4, I think as written it gives us maximum flexibility, as was referenced earlier. I don't happen to think that market expectations would be changed much if we added a sentence about downside risks to growth. I think last time around they took our uncertainty paragraph, learned that it meant that there was a rate cut coming, and I don't think we need to push farther than that at this point.

Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you very much. I think we have two fronts on which we have to work—both the macro risks, in particular the housing risks and the liquidity issues, and their interaction, as a lot of people have discussed. So I favor a 25 basis point reduction with the other actions that we will be taking with respect to liquidity—the TAF and the swap. I think it is very important, at least in my thinking, to see them as a package, to try to work on both margins, because many people have raised concerns about the liquidity issues perhaps spilling over into being real economy issues—so liquidity issues turning into capital issues that can turn into credit constriction issues. With respect to the macro risks, most people around the table have said that those are real and that we need to work on those. Then, of course, there is an interaction between the two. Part of the reason for the difficulty of reviving the price discovery process is uncertainty about what is going to happen in some markets, particularly housing markets. So providing a little more insurance there is valuable. But there is also a concern that, even independent of that, there could be liquidity problems that cause difficulties, so working on these two fronts is certainly very valuable. We will, then, have cut the federal funds rate 100 basis points and will have taken some steps, both with the reduction of the difference between the fed funds rate and the discount rate and these new actions, to try to provide more liquidity.

With respect to the statement, I think the statement as it is in alternative B is probably the most effective. It is important for us to express the uncertainty with respect to the balance of risks rather than try to describe the balance of risks. I don't really see what would be added by talking about particular downside risks when we can simply say that there is uncertainty. I agree with Governor Warsh that the markets would interpret this as that there may be more to come and that we will be mindful and watching what is going on. Particularly in the context of the new liquidity actions that we will be taking, it is better to say that we are uncertain than to say that we are uncertain with downside risks and then take these other actions. It is more appropriate for us to convey that the combination of actions leaves us uncertain because that, rather than uncertainty with downside risks, may help unlock some of these markets. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. The modal forecast suggests a cut of at least 25 basis points. In fact, it indicates that we need to have further declines after that. As Governor Kohn pointed out, the 25 basis point cut still leaves us as somewhat restrictive. So we could just sit at a 25 basis point cut and not move further and keep our options open. I think Governor Kohn made a very good argument for that. However, I do really worry about the significant probability that things could go south in a vicious circle. In that context, I think that the issue of macroeconomic risk is really a severe one, and an action of 50 basis points could help deal with that risk. So I would prefer alternative A. If the Committee were going that way, which it is not, I would have added a sentence about high uncertainty because I think the balance of risk sentence does create certain problems. There is a question about whether you should have that at

all. But if you have it in there in situations like this, we definitely should emphasize the uncertainty much more and use a sentence like the one that is in alternative B in that case.

So let me just lay out this argument. Would a 50 basis point cut matter? This is a question that President Fisher has asked. I think the answer is very much “yes.” It is not the actual cut itself that matters; it is the managing of expectations that really matters. In fact, whenever we make a 25 basis point cut and you ask, “How big an impact does that have on the economy?” the answer is, “Not a whole lot.” That comes out of our simulations. It is really the path of interest rates implied by our actions that is important. In particular, the idea here of a 50 basis point cut is that, by getting ahead of the curve, we provide a signal to the markets that we would be willing to take steps to react to events in the financial markets that might indicate that we are getting into a vicious-circle type of situation. That is exactly what I felt we did in the September meeting. That move was very successful, and the markets really improved very dramatically afterward. The signal we were sending at that point was that, if things got much worse, we might have to do it again.

Now, as I said, we thought in October that things were looking pretty good. I thought we had this great game plan; we were on board for the game plan; and, of course, the game plan is unfortunately out the window. So I think that taking an action like a 50 basis point cut would have an important impact and would provide the signals and the managing of expectations that can have critical implications for how the economy evolves, particularly how the credit markets evolve. It also raises the issue that one thing we do need to do, no matter what, is to indicate to the markets that we understand that our job is to prevent bad shocks from propagating in a very bad way. We can’t prevent the shocks—because things happen—but our job is to make sure that they don’t propagate in a very bad way.

The same issue comes up in terms of inflation. I have talked about the real side and the justification for a 50 basis point cut in that case. But what about inflation? Normally this Committee acts in a very inertial way, and under normal conditions, there are good reasons for doing so in terms of the way you manage expectations about the term structure and so forth. But thinking that way about operating in a situation of financial disruption is not the right way to think. In fact, the word that I really like in this context is Governor Kohn's "nimble," which was exactly the right word. You have to be nimble. What do I mean by that? Well, as all of us completely agree, keeping inflation expectations contained is the most critical thing that we do. We do need to worry about the real side of the economy; but we know that, if you unravel inflation expectations, then the jig is up, and you get very bad monetary policy outcomes, not just for inflation but also for the real side of the economy. That is one of the key lessons that we have learned in the past fifty years about monetary policy. So the question here is, Is this a problem? Well, I don't see that there is a problem right now with inflation expectations getting unhinged, but it could happen, and could happen quickly, in the future. That says that we have to be aware of this and possibly change policy very quickly and that the word is "nimble." I don't know if that is what you meant by "nimble," but I like the word. This requires that we reverse course very quickly.

Now, the problem that President Plosser and others have raised is that the Committee has not acted that way in the past, and that really is a serious concern of mine. There are ways to operate differently on that, which is to recognize that if you are going to reverse course, you are not going to do it on the basis of what is going on in the real economy or what is going on in terms of actual inflation. Just as right now our decision is really not so much about the incoming economic data as much as it is about the problems in financial markets and the credit disruption,

I think we are operating in a very proactive, forward-looking way. In that regard, we would have to act similarly in terms of thinking about inflation. There are two cases in which there would be signals that we would have to act very differently. One is that credit conditions could improve very quickly. We are hoping that this would happen, and actually sometimes you do see these things just turn around on a dime. All of a sudden a virtuous circle occurs. If that actually started to happen, it would be imperative if we did a 50 basis point cut that we reverse very quickly on that action. Second, we have information about inflation expectations, and if we saw those numbers starting to go in a bad direction, we should also operate very quickly in a reversing direction. It is extremely important not to be in the Taylor-rule type of framework, where you wait to see actual inflation and output outcomes to drive your policy. It really has to be much more proactive than that. There have been mistakes in the past, at least in my viewpoint, when we could have reacted more quickly. For example, in '98, it was very appropriate for us to cut rates the way we did. But we were a bit slow to raise them, and I think part of the reason was that we were reacting more to what was going on. I'm not sure—you can correct me in private afterward, Don—but I think that inertia was there, and if we think about doing things differently, it could work out very well.

I have to say that I do not worry about the political issue of the election. It is a change in the way this Committee operates, but I believe that we can change. [Laughter] If we just think about it and have a framework with which to think about it, we could be much more nimble than we were in the past.

So let me finish. Although I prefer alternative A, I am going to accept alternative B. I am perfectly happy with the language of alternative B because I think there is a lot of uncertainty in the marketplace right now. In particular, I feel that showing that the FOMC has consensus in

a very difficult situation like this will be beneficial to the markets. If I were not willing to accept alternative B, it could create some problems in terms of the marketplace, and I certainly am not willing to do that. Thank you very much.

CHAIRMAN BERNANKE. Thank you. Thank you, everyone. Oh, sorry. Vice Chairman. [Laughter]

VICE CHAIRMAN GEITHNER. I support the reduction in the fed funds rate of 25 basis points and the language in alternative B for almost all the reasons that were raised around the table. I just want to say two quick things. One is that, if we start acting as though we are constrained by the political calendar of this country and choose to shade our judgments one way or the other because of knowledge of that calendar, I think it would be a dark day for the future of the central bank. I also think that many of you are being a little unfair to the history of the Committee. I am not sure you can look at the evidence of monetary policy responses over the last two decades and say that there is systematic evidence of a Committee that is quick to lurch down and slow and reluctant to tighten. If that were the case, you would have had a level of GDP volatility and a level of inflation expectations and a volatility of inflation expectations that are substantially higher than they have been relative to central banks that operate with a different kind of regime. I wasn't here for that period, but I am a little surprised by the strength of the conviction many of you have expressed that we have been systematically vulnerable as a Committee to that basic bias. But, Mr. Chairman, I like this option and the language in it. I think the choices ahead of us are going to be harder than this one. We may have some 50 basis point moves ahead of us, but I think at the moment this is the best of the alternatives.

CHAIRMAN BERNANKE. Thank you. Well, again, thank you, thank you all. I do think we need to move today. Once we take into account the drag from financial conditions,

arguably the current rate is neutral or even somewhat restrictive. For example, the Taylor rules in the Bluebook have the neutral rate between 4 and 4¼ percent. Moreover, there has been quite a market change. Whether you look at markets or look at simulations, the FRB/US equilibrium real funds rate, for example, is down 70 basis points since the last meeting, which of course is just a summary of the revision of the forecast. On the other hand, you get similar numbers when you look at actual market indicators. So I think there is a sense in which our policies become de facto more restrictive and need to be addressed. On top of that, there is some case for insurance, although the discussion around the table illustrates that that is a complex idea when you, in fact, have a dual mandate and there are risks in both directions.

If the choice were between 0 and 50 basis points, I would be very tempted to do 50 basis points. I think it would move us more toward accommodation, and it would be very pleasant to get the same kind of market response we got after September in terms of improved functioning and credit extension. That said, I think there are some risks to going with 50 basis points. I acknowledge what others have said, which is that it is not just about the rate but also about what the message is. In particular the markets already expect us to ease quite a bit more. We are not pushing strongly back against it with 25 basis points. If we do 50, we may be saying to the market that we are willing to do even more than you currently expect. I think that poses some risks to inflation expectations and poses some risks to the dollar, which is a little fragile right now. You can imagine it even having reverse effects with respect to the economy—for example, if it caused oil prices to jump or if it caused nominal interest rates to rise, thereby raising nominal mortgage rates. The other concern I have is that, for better or worse, given our communications and market expectations, at this point a 50 basis point cut would be viewed as something of a lurch and might signal, as others have suggested, more concern or private information about the



economy that we in fact don't necessarily have. You can tell that I am quite conflicted about it, and I think there is a good chance that we may have to move further at subsequent meetings. In that respect, it is very important that both in our statement and in our intermeeting communications that we signal our flexibility, our nimbleness: We are not locked in, we are responsive to conditions on both sides of the mandate, and we are alert to new developments.

With all of that in mind—and although I don't think the TAF is really a significant substitute for monetary policy, on the margin I think it is helpful—I recommend 25 basis points and alternative B. I did not hear much support for a downside risks sentence, and I agree that adding it would probably not very substantially affect the signal that we are sending today. So that is my proposal. Any comments? If not, could you please call the roll?

MS. DANKER. The vote today encompasses the directive from the Bluebook and the language of alternative B that was in the Bluebook and in the handout. The directive reads as follows: “The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 4¼ percent.”

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
President Evans	Yes
President Hoenig	Yes
Governor Kohn	Yes
Governor Kroszner	Yes
Governor Mishkin	Yes
President Poole	Yes
President Rosengren	No
Governor Warsh	Yes

CHAIRMAN BERNANKE. Okay. Thank you. We need to recess briefly here for the discount rate.

[Meeting recessed]

CHAIRMAN BERNANKE. Okay. Why don't we reconvene. Again, thank you all. Let me just reiterate what I was saying about the statement. I hope as we go through the intermeeting period that we will try to maintain our flexibility. As we discuss the outlook in public, we should of course give our honest and full views on the outlook and the risks. But we should try to maintain, with respect to policy action, flexibility in the ability to respond to new conditions. That way I hope when we come to January we will be able to respond as the data and the markets best indicate.

We are no longer doing communications in our two-day meetings, so there is a question of what to do in that time. [Laughter] We would like to suggest several things to the Committee. First, as part of the international processes and the efforts of the President's Working Group to study the lessons that we have gained so far from financial turmoil, there are numerous work streams going on about different aspects of the turmoil, including a lot of work being done by people in the System. So we would like to propose—and I hope that we would consider it complementary to our policy discussion—a presentation in January by the staff on various policy lessons learned from the experience we have had with the financial turmoil. Again, this is material that will be feeding into international discussions about how policy, financial regulation, and so on might respond to these situations in the future. The subsequent two-day meeting is in April. The staff is working hard on the issue of interest on reserves. They would like to present to us what they have done and get feedback from us on some parameters of the process. It is in fact quite relevant to our current situation because it bears on issues of monetary control. If we have interest on reserves, we would, for example, be better able to manage the overnight funds rate. So if there is no objection, we would like to put that on the

schedule for April. Subsequent to that, we would like to go back to our practice of having presentations on topics of interest. We would like to put special emphasis on research taking place at Reserve Banks, and we will be sending out a memo soliciting ideas from the Committee and from the Reserve Banks in the hope that individual Banks, in collaboration with others, might take the lead in making presentations of relevant research. So that is the current plan for two-day meetings. Are there any comments?

Okay. Finally, the next meeting is Tuesday and Wednesday, January 29 and 30. We will adjourn in a moment for lunch, and over lunch Laricke Blanchard will give us a brief presentation of congressional matters.

VICE CHAIRMAN GEITHNER. Mr. Chairman, may I make one point about January, which, as you are all aware, is that I don't think any of us—and it is really not the staff—will be in a position in January to provide a definitive set of convictions about really what worked, what didn't work, what really contributed to it, and what we did to the incentives that financial market participants face. Just to make sure that we don't raise expectations too much for the Committee, I think that it will be at best an initial, tentative diagnosis with some initial, tentative sense of the things we want to look at and that it will probably be the end of the beginning, not the beginning of the end, of that process. [Laughter] Is that okay, Mr. Chairman?

CHAIRMAN BERNANKE. I think it will be very interesting. President Yellen.

MS. YELLEN. I just have a question. With respect to the implementation of the TAF, could you clarify what we need to ask our boards of directors to do and when?

CHAIRMAN BERNANKE. Can I get some help? Scott.

MR. ALVAREZ. I circulated to the general counsels yesterday resolutions that could be presented to the boards of directors that adopt the result of the auction as the recommendation by

the Reserve Bank for the discount rate on the TAF. The Board would then be accepting those and voting on them.

MS. YELLEN. Do we have those? We have a meeting on Thursday morning.

MR. ALVAREZ. Yes. The resolutions have all been circulated to all of the general counsels of the Reserve Banks, so they should have them and could be presenting them.

MS. YELLEN. But you are not circulating them to us?

MR. ALVAREZ. I could give them to you.

MS. YELLEN. That would be nice. [Laughter]

MR. ALVAREZ. It is less for you to carry home.

MS. YELLEN. But general counsels normally don't participate in this process.

CHAIRMAN BERNANKE. He is not speaking to you? [Laughter]

MS. YELLEN. No, he didn't speak to me.

MR. ALVAREZ. I can send a copy to all the Presidents.

CHAIRMAN BERNANKE. All right. President Fisher.

MR. FISHER. Mr. Chairman, I just want to make sure that I heard you clearly earlier. We have kept this contained, including the swap ranges, which is very impressive. Everybody should pat themselves on the back. [Laughter] We're broadening the circle tonight or this afternoon, and I'm not quite sure what your message is. I assume that we are announcing it tomorrow morning because of the international complexities. Nobody seems to know about this yet that I am aware of. Do you want us to inform our full boards, or do you want us just to inform our chairmen, or do it late tonight, or is it up to our discretion? I just worry about leakage.

CHAIRMAN BERNANKE. We were asked whether it was okay to inform the boards. Given that the boards are often privy to confidential information, I didn't see any reason to prohibit that. I think in some cases it might be a useful compromise, instead, just to inform your chairman. But we are not requesting that you inform your board. It is up to you. If you think it would be useful, by all means. Of course, this will all be available first thing in the morning. So if you prefer to call immediately after and discuss it—any way that is good for you is fine with us.

MR. FISHER. I just wanted to make sure there wasn't a subtext to the message, but I've got it. Thank you.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Just to clarify what our boards have to approve, as I understand, it is the willingness to accept the rate that comes out of the auction at the discount window.

MR. LACKER. For the loans made at the facility.

CHAIRMAN BERNANKE. The discount window will still exist. They will still be making loans at 50 basis points above the fed funds rate. This is a new facility, approved by the Board. What your board has to approve is the willingness to make loans from your discount window at the rate determined by the auction.

MR. PLOSSER. That is what I understood. Okay.

VICE CHAIRMAN GEITHNER. One clarifying thing, and just a question for Scott. Is it okay from your perspective if the recommendations come from boards of directors after the announcement, so long as they come before the first auction? So Thursday would be fine?

MR. ALVAREZ. They just have to be here by December 17.

CHAIRMAN BERNANKE. All right. The meeting is adjourned.

END OF MEETING