June 25, 2008—Morning Session

CHAIRMAN BERNANKE. Good morning, everybody.

PARTICIPANTS. Good morning.

CHAIRMAN BERNANKE. We have two major items this morning. We'll first complete the discussion of policy action and the statement; and in the second part of the meeting, we'll discuss supervision of investment banks and some related policy issues. Over lunch, if time permits, we'd like to hear Laricke Blanchard talk about congressional developments, and we'll have a chance to ask questions there as well. So without further ado, let me turn to Brian to introduce the policy discussion.

MR. MADIGAN.[4] Thank you, Mr. Chairman. I will begin by referring to the draft announcement language in table 1, included in the package labeled "Material for FOMC Briefing on Monetary Policy Alternatives." As Chairman Bernanke noted yesterday, this version is only slightly revised from the version discussed in the Bluebook. Rather than keep you in suspense, I will note now that the revision is simply to strike the phrase "near-term" from alternative B, paragraph 4.

Turning first to alternative A, the Committee would ease policy 25 basis points at this meeting and would issue a statement similar to the one published after the April FOMC meeting. The second paragraph would indicate that economic activity has remained weak in recent months. It would recognize that consumer spending appears to have firmed but would go on to mention other aspects of economic performance that remain weak. The paragraph on inflation would cite the recent further increase in energy prices but would also note the stability of core inflation. It would again express the Committee's expectation for inflation to moderate, partly reflecting a leveling-off of energy prices, but would acknowledge that uncertainty about the inflation outlook remains high. As in April, the final paragraph would be silent on the balance of risks and on the likely path of policy.

For most of you, your baseline outlook would seem to provide little support for selection of alternative A at this meeting. As was noted yesterday, most of you conditioned your projections on a path for policy that begins to tilt up either immediately or sometime in the next few quarters. With such a policy path, the central tendency of your projections points to a gradual pickup in economic growth and a fairly prompt drop in total inflation as energy and other commodity prices level out but only a gradual decline in core inflation, which reflects the moderate amount of economic slack that you foresee over the next few years. As was illustrated in one of

[4] The materials used by Mr. Madigan are appended to this transcript (appendix 4).

the optimal control simulations presented in the Bluebook, a case can be made for alternative A if you agree with the staff baseline outlook and favor aiming for 2 percent inflation over the longer term. One of the estimated policy rules presented in the Bluebook also suggests modest further easing, but again that prescription relies on the staff's forecast rather than on your generally stronger near-term outlook. But given the modal outlooks of most members of the Committee, any case for easing at this meeting would seem to be best motivated by persisting concern about the downside risks to growth that many of you again cited in your forecast submissions. The "recession" simulation in the Greenbook provided one plausible scenario for the realization of such risks and suggested that the funds rate might need to be lowered to 1½ percent.

Under alternative B, the Committee would leave the stance of policy unchanged at this meeting. The statement would note that economic activity continues to expand and, as in alternative A, would mention the firming of consumer spending. It would cite the same factors that could restrain economic growth that were referenced in April and would add the rise in energy prices to the list. The inflation paragraph would again convey the Committee's anticipation that inflation will moderate but would elide the explanation for that expectation and would reference high uncertainty about inflation prospects. The final paragraph would indicate that the downside risks to growth appear to have diminished somewhat and that the upside risks to inflation and inflation expectations have increased. As I noted previously, we have suggested that the phrase "near-term" be struck as the Committee's focus presumably is on longer-term inflation. The references to risks to both growth and inflation would be consistent with the concerns that you expressed in your forecast submissions. The statement proposed for alternative B seems generally in line with market expectations, and an announcement along these lines is unlikely to provoke much market reaction. By pointing to reduced risks to growth and increased risks to inflation while not explicitly stating that the inflation risks predominate, the Committee would likely be seen as suggesting that its next policy move could be toward firming but also that such a move probably was not imminent.

A policy approach along the lines of alternative B seems generally consistent with the projections that many of you provided for this round. Although most participants conditioned their projections on a steeper policy path than the one in the Greenbook, many also appeared to assume that the firming process would not commence until later this year or in 2009. A decision to stand pat at this meeting might be motivated importantly by your sense that the risks in both directions around your baseline projections are substantial. While staying your hand today might risk a further upcreep in inflation expectations, you might also be concerned that a policy firming now, given that financial markets are still fragile, would risk having outsized market effects with adverse implications for an economy that remains weak. As a result, you may see benefits to allowing more time for financial markets to recuperate and more time for information on the outlook to accumulate before taking policy action. Holding the funds rate at 2 percent at this meeting would be consistent with the

Committee's past behavior as captured by the estimated outcome-based rule presented in the Bluebook.

Under alternative C, the final column, the Committee would firm policy 25 basis points at this meeting. In the statement, the paragraph on real activity would be identical to that for alternative B. However, the third paragraph would provide the motivation for the action by emphasizing that overall inflation has been elevated, that energy prices have risen further, and that inflation expectations have risen further. No assessment of the balance of risks would be provided in the final paragraph, thus avoiding a suggestion that the firming signaled a sequence of further rate increases. Nonetheless, with market participants currently seeing only a small chance of a rate increase at this meeting, an announcement along the lines of alternative C would likely prompt a considerable jump in short- and intermediate-term market interest rates.

Although most of your forecasts appeared to assume that policy firming would begin later this year or early next year, some of you explicitly assumed an earlier start to policy tightening. Members might believe that firming at this meeting is warranted partly by evidence of some reduction in downside risks to growth. Recent spending data suggest that economic activity has a bit more forward momentum than previously perceived, reducing the odds on recession; the modest improvement in financial market conditions points to some reduction in downside risks; and the Federal Reserve's special liquidity facilities appear to have been successful in reducing the odds of negative tail events and severe adverse feedback loops. Thus members might see it as appropriate now to begin to reverse some of the Committee's past policy actions to the extent that those actions were seen as motivated by downside risks that have now diminished. Also, near-term firming might be motivated by the further increases in inflation pressures and risks resulting from the continued upward march of energy and some other commodity prices. Finally, with inflation expectations continuing to show some signs of moving up, a firming of policy at this time might be viewed as a timely shot across the bow that could be helpful in restraining such expectations.

I thought that it might be helpful to conclude by reviewing two exhibits from the medium-term strategies section of the Bluebook, starting with the optimal policy simulations that are reproduced in exhibit 2. The simulations underlying these exhibits are based on the FRB/US model after adjusting it to line up with the Greenbook forecast and extension. As usual, these simulations assume that you aim to minimize the sum of squared deviations of inflation from target, squared deviations of the unemployment rate from the NAIRU, and squared changes in the nominal funds rate. Two key points can be drawn from these simulations.

First, whether policy firming should begin sooner or later may depend partly on your longer-run inflation objective. As shown by the black line in the top right-hand panel, if your objective for the longer run is to get back to a 2 percent inflation rate, these simulations suggest that you can hold the funds rate steady or even ease slightly further before beginning to firm in 2010. This policy path produces a somewhat faster decline in the output gap and thus somewhat slower disinflation than in the Greenbook and extension. In contrast, the simulations shown in the left-hand column suggest that pursuit of a 1½ percent inflation objective would involve policy firming beginning quite soon. In general, the policy paths described by many of you in your forecast submissions seem to fall between these two scenarios, apparently reflecting your sense that aggregate demand growth could be a bit stronger and inflation pressures a bit more intense than projected by the staff as well as your dissatisfaction with a path for inflation that is as shallow as that for the scenario with a 2 percent inflation objective.

The second point underscored by these simulations is that, even though the near-term path for the unemployment rate is a bit lower than in April, reflecting the recent indications of somewhat greater strength in aggregate demand, the medium-term outlook involves larger and more persistent slack than foreseen in April under either inflation goal. Despite that greater slack, as shown in the bottom two panels, core inflation under both inflation objectives runs 0.1 to 0.3 percentage point higher over the next four years than in the April simulations. That, of course, is the fundamental nature of a negative supply shock: Policymakers are forced to accept some combination of greater economic slack and higher inflation during a period of transition to a lower output path and, presumably, to an unchanged long-run inflation rate. That same point was made in a Bluebook box and in a staff paper on this subject.

Turning to your final exhibit, I would like to note that, in response to the comments of some members at recent FOMC meetings, the r* exhibit in the Bluebook has been augmented to include two additional measures of the real federal funds rate. Line 11 in the table at the bottom shows a measure of the real federal funds rate that uses lagged headline inflation as a proxy for expected inflation. By contrast, our standard measure, shown on line 10, employs lagged core inflation as the proxy. Line 12 shows a measure based on the staff's projection of headline inflation. Both of these new measures, at minus 1.3 percent, are considerably lower than the current value of the standard measure, minus 0.2 percent.

I want to emphasize, first, that these additional measures should not be compared directly with the r* measures shown in lines 1 through 9 of the table because the values of those measures are in part a function of the proxy used for expected inflation. For example, the r* value that would be consistent with the Greenbook projection and the actual real funds rate based on the lagged four-quarter average of headline inflation is minus 0.7 percent. Moreover, even if we redefined the Greenbook-consistent measure of r* to use lagged headline inflation, the implied 0.6 percentage point gap between the actual and the estimated equilibrium real rates would not necessarily imply that you should quickly raise the nominal funds rate by more than ½ percentage point. If, like the staff, you think it likely that headline inflation will moderate substantially later this year, then it follows that a gradual firming of policy in nominal terms would be consistent with a substantial rise in the

> real funds rate on this measure over time. Indeed, in the staff's view, the average value of the real federal funds rate over the next few years on any measure is a bit above the corresponding value of r*, and consequently the trajectory of the real funds rate on any measure would be consistent with protracted slack and declining inflation over the next several years. Of course, you may not agree with the staff about underlying trends for prices and real activity and, hence, about the value of r*. Even if you do agree, you may be dissatisfied with the projected trajectories for key variables such as output, employment, and inflation. Such considerations illustrate why no estimate of r* can be a complete guide to policy. That completes my prepared remarks.

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

MR. LACKER. Thanks, Brian, for including these two new lines of the real federal funds rate. As I remarked yesterday, one use of the figures is to look back and judge the degree of accommodation relative to other historical episodes. My understanding is that the Greenbook forecast of headline inflation four quarters ahead is higher now than it was in 2004, when the black line in your exhibit 3 last hit its lowest point. My understanding is that, if you drew that black line using the equivalent of line 12, the Greenbook's forecast for overall inflation, the trough in 2004 would lie around zero, and we would now be at minus 1.3.

MR. MADIGAN. Unfortunately, President Lacker, I haven't made that computation, so I can't confirm that.

MR. LACKER. Okay. Just a comment then.

CHAIRMAN BERNANKE. Governor Mishkin.

MR. MISHKIN. Just a quick question: When you do this based on the Greenbook projection for headline inflation, how far forward are you going with headline inflation?

MR. MADIGAN. Well, in any given quarter, it's four quarters ahead.

MR. MISHKIN. Four quarters ahead.

MR. MADIGAN. Yes.

CHAIRMAN BERNANKE. Any other questions?

VICE CHAIRMAN GEITHNER. May I?

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN GEITHNER. Brian, it might be helpful if you would circulate your remarks about the new exhibit 3 and its implications after the meeting. That was very helpful. But I just want to clarify one thing. Could you just repeat what you said—looking forward under any of these basic measures, where do you expect the real fed funds rate to be in relation to r*?

MR. MADIGAN. The actual real federal funds rate is above r* under any measures—so in other words, our outlook is the same. These are just different yardsticks for assessing our basic view of the stance of policy.

CHAIRMAN BERNANKE. If there are no further questions, why don't we begin our go-round? President Evans.

MR. EVANS. Thank you, Mr. Chairman. I'd like to start by saying that I agree with your comments yesterday about how we should proceed with the Committee approach and think very collaboratively about the policies and delicate strategies that we're facing. Although we disagree on a number of the elements of the outlook, I think that bringing everything together is a very important part of this.

I have fully endorsed funds rate cuts that we have taken so far in large part as insurance against tail risks to growth. I think that policy last summer was much too restrictive given what we were facing and that, along the way, a lot of these cuts have been motivated by tail risks to growth. The funds rate at 2 percent is pretty ample insurance to my mind—more so given the improvement in the outlook for growth that we've seen as second-quarter growth has been marked up so much and even more so given the inflation risks that we're facing, the risks to inflation expectations, and the potentially very low real interest rates that we might be looking at, depending on the measure. If we had the opportunity to recalibrate things a bit, I probably would prefer something more like a 2½ percent fed funds rate to be positioned against the different risks that we're facing, but I understand that we're at 2 percent, and no change seems like the right move for today.

I do have a few concerns about the way we're thinking about this, more in the line of risks. One is that, as we take insurance against tail risk, we're positioning the funds rate against an event that we think is not the most likely and is negative compared with where we are. Unless and until that event happens, policy is somewhat accommodative because it hasn't happened, and we're thinking that it is closer to where it ought to be if that should happen. Unless you think that we haven't taken out insurance, then I think that we have more accommodation than we might like.

The second concern is whether it is possible to be more precise about what we mean by this tail risk. I mean, it's really a catch-all. Nobody is very comfortable with all of this. What are the markers that we could look at for improvement if we could quantify this somehow? Is it that financial markets should be functioning better? I think surely that is the case. Is there a way that we could describe that? I'm sure we'll disagree on many elements of this. Labor market improvement—we should expect that, if the labor market does better than we were thinking, then that would tend to bolster consumption spending a bit better in the face of all the shocks that we're looking at. So the extent to which the labor market doesn't continue to deteriorate, at least in line with some of the recession scenarios and the tail risk scenarios that we were thinking about, is a potential marker.

As we keep pushing out our expectation that the economy is going to weaken—and we've done this a number of times—and if we're looking at the third quarter being revised up—and I agree that we're facing a lot of risks there—but if we start marking that one up, I think that's a marker that we have to be concerned about. Obviously, if oil prices and commodity prices were to decline and free up purchasing power for consumers, that would help out, too. So these are just some of the things that come to mind. Is there a way to think about the details a little better, with a bit less of a SWAG?

Another risk relates to financial markets. Here I'm thinking about the really influential work of yours, in 1983, on nonmonetary influences on the Great Depression. A lot of the actions that we have taken are defenses against those types of issues, right? In the 1930s, when the economy was doing very badly and banks were failing—I'm telling this to you, and you've described it to everyone—then the knock-on effect was that the banks weren't there anymore and important resources for evaluating credit were lost, and so it was more expensive and very difficult to do. We have some of that going on now, right? We've moved from the banks making mortgages and holding them to the "originate to distribute" model. Those resources have been dispersed, and now that securitization market is closed. I heard that very clearly yesterday. Those important resources aren't there to originate mortgages, so if we get to the point that buyers are willing to purchase these houses, that could be a concern.

What happens if there's a true impairment to the financial capital stock, and real resources aren't there anymore to help out with this? We're probably looking at a reallocation of resources from that sector of the financial market either back to banks or to somewhere else. But as we see those resources reallocated and as we think about unemployment being higher, we can talk ourselves into thinking that a lot of slack is in the economy when, in fact, there may not be so much slack. At some point it may be slack, and at other times it won't be, until those resources are reallocated most efficiently. I think this could reduce potential growth rates and have structural elements to it, not just cyclical elements. So there's not a slam-dunk for this. There is just a risk that an element of that is playing out throughout this, and other factors are superimposed on that.

But it's something that I worry about. In a robust type of policy development, I think we should be considering things like that. It's just the case that, in the current situation that we're looking at, there might be a limited role for monetary policy to repair real capital stocks.

Another concern is that anytime we've engaged in substantial risk-management policies, there has always been difficulty in taking them back. That's part of the delicate strategy that you are referring to, I think. That's how I heard it. So we have to be very careful. There's a lot of art to this clearly, but it would be good if we could offer a few more bright lines about how we'll approach that. Still, I certainly agree. I think we need to seek consensus. It's our role to raise these issues and then come to the best judgment. So I'm quite comfortable with no change today. I'm quite comfortable with the language in alternative B, although in the third paragraph we say, "However, in light of the continued increases in the prices of energy," and I think it would be better if we didn't say "continued." I think it's enough to say "the increases." In part, I don't know if this is a marker that, if prices level out, we'd still be comfortable with the inflation risk. I think that there will be a lagged effect of all the very large increases that we've seen for oil as they work their way through. If prices just level out, we still have risks to inflation expectations. So I prefer taking that out. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you.

MR. KOHN. A two-hander, Mr. Chairman.

CHAIRMAN BERNANKE. Governor Kohn.

MR. KOHN. President Evans, so you are arguing that the re-intermediation process is going to raise the NAIRU. I thought that the NAIRU depended on the structure of the labor markets, job matching, and stuff like that, so I didn't quite understand the connection.

MR. EVANS. I'm alluding, without understanding or working out, to a sectoral-shifts model of unemployment and how that search process could be more difficult. You're just taking resources that over some period took a while to allocate to the financial sector and now they have to be reallocated somewhere else.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. Recognizing, as I do, where we're coming from and its dangers, I think more-recent data suggest that the downside risks to growth have diminished, and in my judgment the current stance of policy is much more accommodative than necessary to address these risks. I continue to believe that the two most recent policy actions of this Committee were more than sufficient, and we really need to think about reversing them sooner rather than later. Inflation risks have risen, and we have seen erosion in longer-term inflation expectations. As I noted in my previous remarks on the outlook, if we do not begin to remove policy accommodation soon, I think we risk having to tighten policy more aggressively in the future to reestablish our credibility.

A couple of things. It struck me in looking at some of the major economies besides the United States—the European Union, Japan, and China—if you look at the real interest rates, they're low. I mean, they are 1 percent or less or negative. So this is a lot of stimulus coming into the world economy. And to make my point again, I don't think you can have a sustained recovery with a sustained inflationary environment, which we're in danger of encountering if we continue on this path.

Over the past several weeks, markets have significantly altered their expected funds rate path to remove policy accommodation, and therefore, I don't know that doing something today would be that big a surprise. The current funds rate path built into the market rates is closer to what

I believe is desirable to maintain price stability over the long run, but I would prefer moving somewhat faster—3 percent by the end of this year and perhaps 4¼ percent by the end of '09. Thus, in my view, we should begin the process of removing monetary policy accommodation by increasing the fed funds rate target by 25 basis points at this meeting. I think this action would perhaps be somewhat unexpected, and I recognize that there is some risk that markets would react by moving the funds rate path up more dramatically than some might desire. However, taking this action would move us beyond merely talking about inflationary risk and would help us contain inflation expectations by reaffirming our commitment to maintaining price stability. I think it would quickly have a positive effect on the economy as these expectations begin to shift. Now, assuming that's not the majority view today, I would then encourage us to set the stage in our language for stronger actions coming in the future. That is an important issue especially, as you mentioned yesterday, in terms of remarks that we might make following this meeting, in speeches and so forth.

Finally, let me just say that I think policy is currently accommodative, perhaps very accommodative. The insurance policy taken out earlier this year to guard against the tail risk of spillovers of the financial distress to activity is less necessary, perhaps far less necessary, and it is potentially even harmful to the efforts of maintaining price stability. Therefore, I encourage action sooner rather than later. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. The growth outlook has improved over the last two months, but the inflation picture has not. If anything, it has deteriorated. I think it's clear, as President Hoenig argued, that we should be tightening policy soon. The extent to which we brought the funds rate down was predicated on downside risks and the notion that we could reverse course rapidly. As downside risks now look much less likely, I just don't see how an argument that 2 percent was the appropriate funds rate in April does not also imply that a higher funds rate would be appropriate now. Taking back some of that stimulus at this meeting, however, is probably inconsistent with the commitment implied by the Committee's traditional interest rate smoothing behavior. So I'm willing to stand pat today with the funds rate.

The timing of such moves is going to present us with some trouble going forward, though. Even if we avoid outright recession, as now seems probable, the unemployment rate is likely to keep rising for a time. But waiting isn't going to make it easier for us, in any event, because there's a likelihood of the fourth quarter's showing a slowdown when the stimulus wears off. But inflation is going to increase in the near term as well. At least that seems likely, and holding rates down while that happens and while inflation expectations are already fairly elevated seems awfully risky to me.

I can understand the need for some conviction when we raise rates. When we began cutting rates aggressively in January, there were some significant uncertainties in the inflation outlook, though. I hope we don't set any higher a threshold of conviction for rate increases than we set for rate cuts. Looking back at 2003-04, and this is strictly in hindsight, one can argue that we erred by waiting too long to reverse course, and I've heard you yourself make that argument, Mr. Chairman. So the logic of risk management works in both directions. I think we need to keep that in mind.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I favor alternative B with the proposed wording. Given the forecast and the risks around it, our next move on the funds rate is likely to be up, and the question is when. Assuming that the data on growth and inflation come in roughly as I and the Greenbook expect, I would envision beginning to remove policy accommodation toward the end of this year, similar to the assumption in the Greenbook. As I mentioned, I'm not very confident that the outlook for growth and employment has improved as much as the Greenbook assumes. I'm concerned that households and firms are in a python squeeze of an intensifying credit crunch and a continuing decline in housing wealth as well as pressures from surging food and energy prices. I think the economy has shown resilience so far, and that's reassuring, but I don't think it's assured for the future. The aggressive policy actions that we have put in place since January are actually working to cushion the blow, and that's part of the reason that we haven't seen a greater unraveling so far.

I mentioned yesterday that, with respect to inflation, the behavior of both core inflation and wages thus far makes me optimistic that headline inflation will come down if commodity prices finally level off. But I think there's no doubt that the risks with respect to inflation are not symmetrical at this point, and they have definitely increased. I still see inflation expectations as reasonably well anchored, but there's no doubt that a wage–price spiral could develop, and dealing with it would be a very difficult and very painful problem for the Committee. So while I feel that we are essentially credible now, I wouldn't want to take absolutely for granted that this is something that we can count on going forward.

At this point, the federal funds rate remains well below the recommendations of most versions of the Taylor rule. I have viewed this as appropriate, not largely as insurance against downside risk but simply in refection of the unusually severe pressures from collapsing wealth and tight credit and financial constraints. But it does seem to me to be appropriate going forward to at least take out some insurance against the development of a wage–price spiral mentality, and that could take the form of gradually removing that discrepancy from what, for example, a Taylor rule recommends. But before we begin to do that, it does seem to me that we should wait to get a somewhat clearer picture of where the real side is going.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. In my view the economy is evolving in a way that suggests that we need to take back sooner rather than later some of the insurance we put in place against downside tail risk. I base this view on several points. First, economic activity remains weak. I don't dispute that. The data since our last meeting have been better than expected. The Greenbook forecasts as well as most private-sector forecasts have been revised up. So although downside risks remain, the tail risk of a significant recession-like outcome for the economy, though it has not vanished, has certainly diminished. Second, financial market indicators suggest that market functioning, though not back to normal, has certainly improved somewhat in recent months. Demand for Fed liquidity from the primary dealers has fallen. Primary credit borrowing generally is down. Now, although we may wish to keep our liquidity facilities for now as a backstop, the extra accommodation that we have built into monetary policy may no longer be needed or even appropriate at this point. The real economy and financial functioning have improved since our last meeting, but the inflation outlook has worsened, as we have been hearing. Headline inflation is up. Expectations of various kinds are elevated. Upside risk to core inflation has increased, as the Greenbook has said. As I said yesterday, these upside risks stem not only from the potential pass-through of energy prices but also, in my view, from the fact that we're running a very accommodative policy despite rising inflation.

In fact, I believe that policy has actually become more accommodative since the meeting at the end of April. First, the nominal funds rate has been at a constant level, but expectations of inflation have risen. So, in fact, the real funds rate has actually declined since our last meeting as inflation has risen. Second, real rates of interest more broadly have been gradually drifting up since late March or early April. The TIPS rates, the real interest rates, have been drifting up by, depending on which term you look at, anywhere from 25 basis points to 35 basis points. So as the real rates on risk-free securities have risen, which may be appropriate given the fact that prospects for the real economy have improved modestly, the real funds rate has been declining. As a consequence, whatever you think about the level of the fed funds rate, we have become more accommodative since the last meeting.

As I've argued before in this Committee, optimal monetary policy in a broad class of models suggests that you get Taylor-rule-like rules but that the funds rate follows the real interest rate as it moves around. Optimal policy calls for following the real rates. I argued that was the case and appropriate as real rates fell in the context of a weakening economy. It was important that policy match those declines in the real rates, which I think it did. It's a coherent policy, but it also means that as real rates begin to rise, as we have been seeing, policy needs to adjust to those real rates rising. Now, of course, a lot of judgment is required in this type of policy. There are smoothing issues. Real rates could be quite volatile. There's debate about which real rate you want to be looking at. I understand that. But I don't think there's any question that the objective should be to match those movements in the real rates, and we should be thinking about it in those terms.

Long-term inflation expectations have been volatile but have moved within a reasonably defined range over the last period, and I'm comforted somewhat by that. But as I have said, I believe that inflation expectations are fragile. At the very least, the anchor is dragging, and if we continue to maintain a real funds rate well below zero with rising inflation well above our goal, I do not think we can continue to assume and trust that expectations will remain well anchored.

We've done a good job with our words so far, but with the shift from downside risk to growth to upside risk to inflation, we need to take action to ensure that price stability remains a credible objective of this Committee. If the economy and financial markets continue to evolve as they have over the last couple of months, that time may be soon. We must take back some of the insurance we put on. Not doing so soon risks having to respond more aggressively later on, which I believe will be much more difficult for the Committee to do. In fact, smaller moves sooner will help with our credibility in the marketplace and will help anchor those expectations as we wait for more data and for the economy to strengthen.

In this regard, I think we are fortunate that market participants reacted to the incoming data by appreciably tightening their policy expectations. Thus, a move to raise rates is unlikely to catch them off guard. Moreover, I don't think that we should disabuse them of such policy expectations. Some might argue that an increase in policy expectations is a negative development. I would disagree. I think that it reflects rising expectations of a somewhat stronger economy and concerns about inflation. As the Chairman said, we should resist any erosion, any rise in longer-term inflation expectations. Now, as I said, the timing of such a move is a judgment call, and I expect that my views will differ from those of some of my colleagues, particularly since I had my fed funds rate path rising to 2¾ percent by the end of '08. So let me turn to language.

In the rationale in paragraph 2, I have only one suggestion. I think that we should acknowledge that the functioning of financial markets, while not back to normal, has improved. So instead of saying "financial markets remain under considerable stress," which we have said for some time, perhaps it might be easy to say just that the financial markets remain under stress, leaving out "considerable." That acknowledges the fact that there's some improvement but that stress is still there. Finally, in paragraph 4, I am pleased that the revisions make more explicit that the upside risks to inflation and inflation expectations have increased and that the downside risks to growth remain but are diminished. I was going to suggest that we strike "near-term," but Brian beat me to the punch there. So I approve of that change. I think that's very good. In alternative B, I would prefer that we add some of the language from the Chairman's recent speech to paragraph 4. I think it would be a stronger message that the Committee will take actions to ensure that inflation expectations do not become unhinged, and it would also convey that both parts of our dual mandate, price stability and economic growth, are at risk should inflation expectations become unhinged. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support the action and language of alternative B; Brian's striking of "near-term" is fine with me. This is a tough situation, as we all remarked yesterday. Commodity prices are at the center of the problem that we find ourselves in. In my view, we didn't cause the rise in commodity prices. We may have contributed a little around the edges, but whatever we contributed was a necessary byproduct of what we needed to do to cope with what was happening to the U.S. economy, and we can't reverse the rise in relative prices without tremendous cost to the U.S. economy. Or even the rise in headline inflation, we couldn't undo that without putting a huge amount of slack in the economy to force down wages, sticky prices, et cetera, and that would not be appropriate.

I think the classic response that we've all been talking about is to take a temporary increase in inflation and in unemployment that facilitates the relative price changes that need to happen, concentrate on second-round effects, and make sure those increases are temporary. I think that's inadvertently what we've fallen into here. Given the housing and financial shocks, the 2 percent fed funds rate of alternative B is consistent for now with continuing along the path of the temporary increases in inflation and unemployment. Unlike many of you, I don't see the current rate as extraordinarily accommodative, given what else has happened in financial markets. There is no insurance in the staff forecast, right? The Greenbook forecast has zero insurance in it. My own forecast was a little stronger than the Greenbook's. I think all of ours were a little stronger than the Greenbook's, but even if I marked up r* by ½ point or 1 point, that's not a huge amount of insurance in the circumstances that we're facing. I note that no one sitting around this table predicted a decline in the unemployment rate over the balance of the year; so everybody has 5½ percent or higher unemployment rates predicted by the end of the year. The staff thinks that the current 5½ percent is a little too high. So they are expecting the unemployment rate to come down in the next month or two. Given this, we're all expecting the unemployment rate to rise over the balance of the year. I would think, given the lags in policy, that if you thought policy was hugely accommodative, you'd see some decline in the unemployment rate over the next six, seven, or eight months. I think our own forecasts suggest that some insurance might be here, but not the amount that I'm hearing some of you talk about. I don't see the consistency there.

My own view is that there's probably a little insurance in it, and it's appropriate for now. I agree that the next move in interest rates is more likely to be up than down. I assumed, like President Yellen, that it would be at the end of this year or at the beginning of next year. The rising unemployment that we all expect should help damp inflation and inflation expectations and make it very hard to pass through all these cost increases that we're hearing from businesses that they want to pass through and certainly make it hard for wages and cost pressures to rise.

So I agree with everyone else that the weight in the two tails has shifted. There's less weight in the downside risk tail for output and more weight in the upside risk tail for inflation. The statement does a very nice job of saying that explicitly, and I think that we just need to await incoming data and information about inflation expectations, costs, and whatnot to see when the appropriate time to move will be. Because I don't think there's a tremendous amount of insurance in there, I think we can afford to be a little patient and data dependent here. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Pianalto. Oh sorry, President Plosser.

MR. PLOSSER. Governor Kohn, a question, or a comment, about interest rates. A lot of our discussion has been centered on how accommodative we think policy is and how we interpret it in the current environment. If I want to quantify the magnitude a bit, at least the way I think about it, even if I believe that the economy is weak enough so that the appropriate equilibrium real rate of interest is zero, we have inflation running somewhere north of 3 percent. That would suggest a nominal funds rate of about 3 percent as opposed to 2 percent. So roughly speaking, I would interpret that to say that we have roughly 100 basis points of extra accommodation built into our fed funds rate relative to what—and that's assuming an equilibrium real rate of zero, which might even be low. So if I'm thinking about it that way, could you clarify how we should quantify it in some way?

MR. KOHN. It's very difficult. We don't know what inflation expectations are. We're all using proxies, as came forth very strongly at the Cape Cod conference where we both were, President Plosser. We don't even understand very well how expectations are formed, and I think what we're looking for is how people perceive the cost of capital to finance purchases. So we're wondering whether this low interest rate is causing them to bring purchases forward from the future to the present to induce them to buy things, capital goods, right? That's the interest rate we're really looking at—the perceived cost of credit to folks—and I'm not sure that subtracting any rate of inflation is the way to get that. Obviously, the cost of credit for housing is perceived as hugely high right now. The cost of credit for automobiles is perceived as hugely high for reasons that perhaps aren't related to monetary policy. I don't think we see a surge in purchases of capital equipment that would suggest that businesses perceive the cost of credit to be very negative. So I think, because we don't understand inflation expectations and can't measure them, you have to look for a lot of different things around the edges to confirm what people perceive the real rate to be. I just don't see a lot of information that suggests that people perceive the real rate to be very negative and that it is influencing how they manage their purchases of goods and services over time.

CHAIRMAN BERNANKE. Thank you. I guess just to say it more simply, all the rates that have determined behavior—for example, mortgage rates, auto rates, or corporate bond rates—are higher than a year ago. Now, unless there has been a major change in long-term inflation expectations, which the TIPS data don't suggest, there don't seem to be indications, as far as interest rates that are relevant to people's spending decisions, that there has been a significant reduction. Someone else had a comment. Governor Kroszner.

MR. KROSZNER. It's directly on this point. It seems that in the situation we're in, with very elevated spreads in LIBOR, there are almost no contracts in the real markets that are related directly to fed funds. It's usually through three-month LIBOR, and we know that the spread is now roughly 70 or 75 basis points higher than it used to be. It used to be about 10 basis points, and now it's around 80. For me that's one rough proxy in how I think about this—that the way in which our actions are being translated into market prices is somewhat different from the way it was when the spreads were lower.

CHAIRMAN BERNANKE. President Lacker will back President Plosser up though.

VICE CHAIRMAN GEITHNER. This is like pro wrestling. [Laughter]

MR. LACKER. Just a brief observation. Spreads always rise in recessions. We always lower real rates in recessions. So to say that the fact that spreads have risen by itself doesn't make this an exceptional circumstance.

CHAIRMAN BERNANKE. The magnitude is somewhat greater, though.

MR. LACKER. For some; not for others. Corporate bond spreads aren't as high.

CHAIRMAN BERNANKE. President Pianalto, we apologize.

MR. PLOSSER. I apologize.

MS. PIANALTO. Thank you, Mr. Chairman. I support keeping the fed funds rate target at its current level and the language in alternative B. I see some hopeful signs that stress in financial markets has diminished as has the threat of a sharp recession. Despite these recent signs, I expect that the growth momentum in the economy will build only slowly. Moreover, I continue to worry that the residential real estate market could deteriorate even more than I had put in my baseline projection. Nevertheless, I am somewhat more comfortable with the prospects for economic activity than I was in April.

At the same time, I can't easily dismiss the recent behavior of energy and some other commodity prices. I found the Bluebook's supplemental analysis on oil prices, inflation expectations, and monetary policy to be very useful in thinking about the dilemma that we face. The fact that oil prices have risen so sharply and have been so persistent highlights the risks surrounding the downward projection that I have for core inflation. Without some evidence of less inflationary pressure I don't believe that the fed funds rate can be kept at its current level for very long. But while I do believe that the next policy action will be a rate hike, the potential for the recovery to sputter makes me cautious about embarking on an upward trajectory for the fed funds rate just yet. I believe that the language in alternative B conveys the right sense of direction for the fed funds rate path, with the right amount of caution. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. U.S. economic data have been stronger than expected during the intermeeting period. The earlier, very aggressive moves in January and March taken by the FOMC were viewed in part as insurance against the possibility of a very serious downturn brought on by financial market turmoil. That very serious downturn has not materialized. Tail risk has diminished significantly. This means that this Committee has put too much economic stimulus on the table and must think about ways to remove it going forward. Failure to do so will create a significant inflation problem on top of problems in housing and financial markets. Slack might be helpful, as mentioned by Governor Kohn, but those effects are small compared with expectations effects. I think it is too early to tighten at this meeting. Therefore, I am supporting alternative B with the language proposed by President Plosser. But the Committee has to think carefully about how and when to embark on a path for interest rates that will set us up to achieve price stability in a reasonable time frame. My sense is that this will require more-aggressive tightening of policy than currently envisioned in staff simulations.

Financial market problems have been described here as a slow burn, and I think that may well be an apt description. Many firms in this sector took on too much risk and, in retrospect, had poor business models. I expect that this will take a long time to unwind. Despite this, the systemic risk component of the situation has diminished considerably. Systemic risk is in part a function of the degree of surprise in the failure of a financial institution that was perceived to be in good health. Surely by now few market participants would be surprised to encounter the failure of certain institutions. Failures, should they occur, can be handled in an orderly way.

Certain investors would lose out in such an event, to be sure, but my sense is that the panic element that would be associated with systemic risk would not be present. I believe that we should start to downweight systemic risk concerns substantially going forward because it is no longer credible to say that market participants are surprised to learn of problems at certain financial institutions. Thank you.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Well, first of all, I believe that policy is well positioned for now from a couple of perspectives. For the next quarter or two, I think there is still some potential for significant disappointment in terms of economic growth—but only for a quarter or two. Beyond that, a pickup in real activity appears pretty likely. That is, based on what I know now, further reductions in the federal funds rate shouldn't be required for the economy to improve next year and beyond, and we do have the liquidity facilities available should strains in financial markets threaten to intensify. Policy is also well positioned for now from a second perspective—namely, that the fed funds futures curves have priced in an increase in the funds rate beginning in the late summer or the fall. I think that this is appropriate because I think we are going to find that we will want to and have to start moving to contain inflation expectations. Precisely when to move may turn out to be a difficult call, but I would like to see futures priced to anticipate such action on our part—as indeed they are at the moment.

That brings me to the recommendation and the language. I think the strategy expressed in the Bluebook associated with alternative B is fine for now, and so I favor alternative B. The language in alternative B is okay as well, although I would endorse President Plosser's recommendation to drop "considerable" from the description of financial strains. The other thing I would point out is that the Bluebook says that, at least in the staff's judgment, the language associated with B might push back expectations for the onset of policy tightening. I am reading from page 33. It is not that I am anxious to tighten necessarily as early as possible, but I would rather not push those expectations back at this point. So if that assessment is correct, it might be advisable to find a way to address that issue. I don't feel all that strongly about it, but I think we could, if we wanted, take the sentence in paragraph 4 that's in red, drop three words—the first word "although," a word at the end of the phrase "remain," and then "they." So you would just say, "Downside risks to growth appear to have diminished somewhat," which I think is true. It doesn't suggest that we are sanguine about growth, although I suppose it could be read that way. But I am a little concerned about the way we might change expectations based on the Bluebook commentary.

CHAIRMAN BERNANKE. You have your Strunk and White style manual with you, I can see. [Laughter] Thank you, President Stern. President Rosengren.

MR. ROSENGREN. I support alternative B. At this time, there are significant downside risks to the economy and financial markets, as the collateral damage from the housing problems works through the economy and financial institutions. At the same time, continued increases in oil and food prices raise the risk that some part of these supply shocks will be incorporated into inflation expectations. In the absence of more-compelling evidence about which of these two risks will dominate, I would favor remaining on hold at this meeting. I hope that the economy picks up in the second half of this year and that the financial markets stabilize so policy can become less accommodative, but it is not clear that this will be the outcome. While the inflation outlook has been affected by continued energy shocks, the future path of oil prices remains uncertain, and recent history has many instances in which oil shocks are short-lived and have little effect on longer-run inflation expectations. Until we have more clarity on the path of the economy and inflation, policy should remain on hold, and our language should be consistent with that.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. I also prefer the fed funds rate recommendation and language of alternative B. It captures the delicacy—I think that word was used yesterday—of the current tradeoffs and leans fairly heavily rhetorically against inflation and inflation expectations. I note that inflation and inflation expectations are mentioned in both paragraphs 3 and 4 using the language, "Uncertainty . . . remains high" and "risks . . . have increased." I think this constitutes considerable stress on the seriousness of our commitment to address inflation and expectations, and it is a complete statement and will serve to condition the market. As Brian said, it suggests that firming later in the year could occur, and I believe that is appropriate. I would like to give the medicine that we have applied to resolve the situation and the financial markets a little more time to work. I am in accord with Governor Kohn's thinking of stimulus or accommodation in terms of the cost of borrowing to real borrowers—individuals and businesses—and, therefore, we really have not seen a proportionate improvement in the cost of capital, notwithstanding such a strong reduction in the fed funds rate.

So as of now, I would expect to support a reversal a little later in the year. I also think there is enough ambiguity currently that giving the situation a little more time to clarify would be helpful. Core inflation has not risen dramatically, whereas headline has, and it is headline that the public is reacting to. Measures of expectations, such as they are, seem to suggest that short-term expectations have risen more than long-term, so there really hasn't been a clear breakout of long term. It may be true that it would be too late if we saw that breakout, but I think we can afford to wait for a greater preponderance of evidence to accumulate over the next few weeks before considering a reversal. So I support, as I said, alternative B and the language of alternative B.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. Mr. Chairman, I listened very carefully to what was said around the table yesterday, and I especially listened very carefully to you. You made a very good and interesting point about the differences from the 1970s. I would add that there are significant differences from the 1970s. We didn't have the Internet in the 1970s. We were not globalized in the 1970s. If you were selling oil into the market, you sold to three buyers—the ten countries known as Western Europe, the United States, and Japan—whereas now you have several billion people more to sell to. Another difference is that the transmission mechanisms were not as fluid, which gets me to a question, really, with which I am wrestling constantly. Before, a cyclical slowdown would lead to a lessening in price pressures. I am not so sure that's correct if we are talking about a cyclical slowdown in the United States. We already have wages going up significantly in the largest factory in the world, which is China, where we source a great deal. So there is wage–price inflation, but there are enormous demand-pull forces that are quite different from what we had before.

I am a little concerned—and I say this with not only respect but humility at having less training—Governor Kohn, when you say that we might tolerate a "temporary increase in inflation." If you opened the *New York Times* this morning, you would have seen that Dow Chemical raised prices 25 percent after just raising them 20 percent—in one month. By the way, I notice that these little bottles of water have gotten smaller—this will be a Visine bottle at the next meeting. [Laughter] What goes into this—the plastic? Here's the point. Many micros make a macro. Micro business operators are not going to tolerate temporary increases in inflation. They are going to act on them. I worry about that enormously, particularly given the fact that they are globalized and they sell to a globalized market. We can be victimized by that. Now, I may have over-analogized yesterday. You teased me after the meeting. Although I like Janet's analogy of the python—one of my tutors at St. John's had a python named Julius Squeezer, by the way. [Laughter] Just to kill that reference, I feel a bit squeezed here at the table.

You mentioned yesterday, Mr. Chairman, three things that caught my ear. Obviously, we need to strive to avoid bad outcomes. Second, we need to decide when we're at the tipping point. We need to pick our moment, as you said. Third, you also said that we need to lean and not lurch. I listened very carefully just now to President Evans, who was most eloquent in his presentation. I happen to agree with him in terms of where I think we should be.

Yesterday I said I thought there were three ways to deal with our current predicament now that the tail risks have shifted. One is to hope it will cure itself. I don't believe that is going to happen because of the way micro operators operate. The second is to treat it rhetorically, and I think that the language in alternative B is quite good, if that is the way you wish to go. But I don't think it is going to get any easier, as was mentioned earlier at this table. I am not sure that things will get easier by August. We then get into an election season, which I think still conditions somewhat our thinking. I think it is important to take a shot across the bow. I think we have to put some substance behind our words. As I said before, and I know you know, I like to be liked. I don't like to be alone. But I am going to vote for alternative C. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me say just a few things. First, to state the obvious—there are risks on all sides of these decisions. Second, I will try to wade into the debate briefly on this accommodation point. My own view is that policy is accommodative—the degree of that is why we are having this debate. I think about our degree of accommodation as a function both of our target fed funds rate and what the financial markets do with it, by which I don't mean just what the expected fed funds targets are out in the future but the transmission mechanism. The degree of accommodation, as we think about our decision now and in the next several months, will depend more on financial market developments than, frankly, the decisions that we end up making on the target; and it is very hard for us to judge the direction of these markets. As much as we have talked about tail risks on the financial market side and the real economy side being diminished, I think all of us would say that there is a real chance that this will be a long, hot summer. It is hard to know what the credit channels are going to do with our target federal funds rate. It is not obvious to me that we should try to perfectly offset the changes in financial market developments by contemplating changes in the federal funds rate now.

What I think most likely is that we won't be as certain as we would like to be regarding growth risks and we won't be as certain as we would like to be regarding financial market developments before we have to begin a posture of removing policy accommodation. So with all those caveats and a view that policy remains more accommodative than we can allow it to be for too long, I will support alternative B and think that we have to remain very open-minded, very nimble, in our task of removing policy accommodation.

In terms of President Plosser's suggestion on "considerable," I think the reason for the debate over using that word is in my own view that these markets are still under considerable stress, but the trend from the last statement to this statement is that they are under less considerable stress. Therein lies the difficulty in wording this in the statement. If we do remove "considerable," it wouldn't surprise me that when we next meet we will say, "Boy, it seems as though stress is up. Wonder if we should put it back in?" I don't feel strongly, other than I don't like the idea of removing it now if we think that there's a chance that the trends, which are very tenuous, turn around. So I think I would favor the language that you have written. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you very much. Obviously, as we have all discussed, we are facing enormous challenges from the continuing strength in prices and price changes in energy and raw materials. Now, some of those are relative price changes that we don't have the tools to address directly. Recently, we have seen wheat come down as Australia has been able to replant, and it seems that things are going to come back. Corn has gone up, as we heard from a number of people around the table, because of the challenges there. We don't have the tools to address that directly, but obviously, when so many of these commodity prices and energy prices are going up, that leads to concerns about where both headline inflation and core inflation are going. So we definitely do have to be very mindful of that.

I think the type of approach that we are taking in alternative B is a reasonable one. Given the challenges that we are facing right now with the fragility in the financial markets—the continuing smoldering of those embers, with still chances that they could reignite and cause us a great deal of difficulty—it seems sensible to me to be roughly where we are now in terms of policy but to be signaling that we understand that challenges are coming from various sources that could lead to inflation pressures and that we need to be ready to offset those.

In terms of how accommodative monetary policy is, I think actually it would be worthwhile—and maybe at the end of this I might pose a question to Brian—to look at LIBOR–OIS spreads and how much they typically go up during recessionary periods. I know that other risk spreads typically go up, but my understanding is that those typically don't go up as much. Since so many contracts are based off the one-month and three-month LIBOR, that 75 basis points suggests that at least now we might want to take that into account in thinking about where monetary policy stands relative to other times when we would have had a funds rate at roughly this level.

In terms of the language, I share Governor Warsh's view on the use or lack of use of the word "considerable." I think President Stern's suggestion—this is always a very dangerous and difficult game—would actually push the markets further than they are because I agree that broadly the path that they are seeing in the future is a reasonable one for them to see. This language would roughly keep it there. Taking out the acknowledgement of downside risks to growth remaining would make me concerned because (1) I certainly see those as still being there and (2) I think that would push the markets further to think that this is a signal that next time we are going to do it, and I don't think we are quite there yet. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. I do support alternative B and the current language in the statement. I have no problem with that. I think it conveys what we need to convey. Although I think that the next move is very likely to be up and it maybe should be done quite soon, I would argue that we still need to have a lot of flexibility and to think in terms of having a lot of flexibility in where we may have to head in the future. I want to argue along those lines and outline why I think that is the case.

The first issue is something that the Chairman mentioned yesterday, about which I felt very strongly—in fact, I meant to say it, but as always the Chairman says things better than I could in this context—that there really is still a very serious possibility that the shoe could drop in the financial markets. The Chairman mentioned a set of institutions that we have to be concerned about, and although there has been some improvement in terms of the stress that the financial markets are under, I don't think we are out of the woods yet. We are likely to be, but we have to be ready to recognize that things could go south. So that's one issue. The second issue is that the recent positive data we have seen are, again, very tenuous to me. I'm hoping that they indicate that things are going in the right direction. But a bunch of things make me very nervous, which I mentioned yesterday—how consumers react in housing crises, consumer sentiment, and the big problem that is going to occur when people have to face very high prices of food and energy, which hit their pocketbook very directly. So, again, that could be quite contractionary. The good news that we have seen recently might reverse very quickly. The third issue is that I think the headwinds could be very substantial in the future, that this cleanup will take a long time, and in that case we could have very slow and subpar growth that could widen output gaps more than the Greenbook and most participants here are expecting.

So I do not consider the current stance of monetary policy to be overly stimulative. For me it is just about right and very much along the lines of what I think would be optimal policy. Of course, my view relates not only to the real economy. I also think that inflation expectations, as far as I can tell so far, are reasonably well contained. There is very little movement in the measures of inflation expectations that I pay most attention to. That argues that our stance is about right. I would also very strongly argue that I do not think that we have taken out a lot of insurance. I have argued that before. We have moved less gradually, which I think is very beneficial, and I would commend the Committee in that regard. But we moved in line with what the forecasts have been telling us optimal policy would be, and I think that is quite important.

However, here is why I think we need to have flexibility in the other direction. If you think about a risk-management approach, it should not be focused just on tail risk to economic growth, which has been our most major concern because of the financial disruption. It equally implies that, symmetrically, we should be just as worried about tail risk to inflation, particularly to long-run inflation expectations, which I think are the key driver of underlying inflation, which is what monetary policy can particularly deal with. Here we have a situation in which we have hit the perfect storm of shocks because of the huge supply shock and there are much more serious upside risks and tail risks in terms of long-run inflation expectations. So I really do worry that with long-run inflation expectations and, therefore, underlying inflation we are in a more fragile situation and that we have to be very cognizant of that in terms of what we do in the future.

The bottom line is that we may have to move very quickly to raise rates if any of several things happens. One is that headwinds are not as serious as I think they are likely to be. There is certainly a very serious possibility that things could be better than I expect. I would not be unhappy, so I would not get depressed, about that. Really more depressing would be if inflation expectations started to look as though they were getting more unanchored. Particularly, I would worry much more about what happens in terms of inflation compensation and the Survey of Professional Forecasters, paying some attention to consumer surveys but putting a lot less weight on them. If the canary starts to look as though it is keeling over, we have to move very quickly, and so I am going to watch that canary very, very carefully.

MR. FISHER. Before the python gets it. [Laughter]

MR. MISHKIN. Before the python gets it. I think another consideration is very important. I have to commend you on the Bluebook this time—it just had some great boxes. [Laughter] It would be nicer if they had a little color to them. As a textbook author, I think they could have been a little ritzier and have had a little color, but they were great boxes. In particular, a very important box was the one on the optimal reaction to oil price shocks. One thing that comes out very strongly from that box is that if your credibility is weak on commitment to price stability and containing inflation expectations, you would have to tighten more to restore that credibility and get to a policy that would produce better outcomes. So here is an issue that, with these supply shocks potentially causing a problem for long-run inflation expectations, we actually may have to react more quickly and more aggressively than we otherwise would. This is an issue that I have been concerned about in terms of communication strategy—about how we better anchor long-run inflation expectations.

So my bottom line is that I support alternative B. I would like to keep the language the way it is currently, which I think works quite well. But I do think that, going forward, we should not lock ourselves into what our policy is going to be, in either direction. We need to preserve flexibility because we could be very surprised, although I think that the signal we have made that we are more concerned about inflation risks is absolutely appropriate. We have to make clear that we will do whatever it takes, including raising interest rates when unemployment is rising, if we feel that long-run inflation expectations and inflation are not remaining under control.

CHAIRMAN BERNANKE. Thank you. Vice Chairman.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I just want to say at the beginning that I think the way you framed your remarks yesterday had perfect pitch and balance, and it is really important that we not get ahead of ourselves in taking too much comfort from the fact that the first half was not as bad as we thought and think that the risks on the growth front are definitively behind us. The improvement in financial markets that many of you spoke of is not as significant as we think or hope; we have had a lot of false dawns over this period. A lot of what you see as improvement is the simple result of the existence of our facilities in the implied sense that people infer from our actions that we are going to protect people from a level of distress that we probably have no desire, will, or ability to actually do. It is sort of like waking up in the hospital and having them say, "You are not dead yet, but we are not sure you're going to live." It is not as good an improvement, and there has been a material erosion over the past four weeks. It is very unlikely that you will have a substantial improvement in overall confidence in markets, a durable improvement in market functioning, and a substantial reduction in those spreads until there is more clarity about the likely path of the economy going forward, house prices in particular, and therefore the cash flows associated with the huge amount of credit that was extended over the past five years.

Again, it is going to be very hard for us to have a better feel for the balance of risks on growth front and the financial sector until we think we see signs ahead of some significant deceleration in the rate of decline of housing prices, if not some actual bottom. On the basis of everything we know, that is still several quarters ahead. Maybe it is going to surprise us on the upside and maybe we are going to see a big improvement in housing demand, but I think that the sense of a bottom looks to be several quarters ahead of us still.

I would say that the risks are still acute. Sure, the markets are a little more confident that we are going to successfully avoid a systemic financial crisis, but I wouldn't take too much comfort from that. I think it is also plausible that oil will be at $150 or $200 over the next six months or so. There is some material probability that the set of challenges on that front is going to get worse. So all that is just in favor of a fair amount of care and caution now, given the scale of the uncertainty out there and how fat the tail risks are on both sides of our mandate going forward.

I like, and fully support, the language in alternative B. I would not—as you might sense from my comments—take out the word "considerable" from the characterization of stress. I am pretty comfortable with the framework laid out here, and, more important, Mr. Chairman, with the broad balance and strategy that you outlined yesterday.

CHAIRMAN BERNANKE. Thank you very much. In April, we signaled that, following our aggressive rate actions and our other efforts to support financial markets, it was going to be a time to pause and to assess the effects of our actions. That was not that long ago, and I think it is appropriate to continue our watchful waiting for just a bit longer.

I talked yesterday about the balance of tail risks as opposed to the balance of risks. I think that, although the tail risks on the growth and financial side have moderated somewhat, they are still quite substantial. I agree with the Vice Chairman on that point. They arise from two separate but related sources. The first is that, notwithstanding the stronger-than-expected performance in the second quarter, I think there is an excellent chance that we will still see a recessionary dynamic with the associated strong movements in employment and production. Second—again as the Vice Chairman mentioned—I do not agree that systemic risk has gone away. I think it is in abeyance. There is perhaps, if anything, excessive confidence in the ability of the Fed to prevent a crisis situation from metastasizing. Even if we don't have a failure of a major firm, we still have the possibility of a significant adverse feedback loop as credit conditions worsen and banks come under additional pressure. So if I could try to think about this—I don't want to say "mathematically"—a lot of our discussion has implicitly suggested that there has been a linear model, which is that we are just trying to balance on the scales this risk against that risk. Again, if you are worried about preventing bad outcomes, you have to worry more about nonlinear or discontinuous changes. I think that, at this point, we still have significant risk of a nonlinear, discontinuous change in the financial markets or in the real economy.

Tail risks have risen for inflation. There is no question about it. I take what has been said around the table extremely seriously, and I am quite anxious about it, I have to concede. If I were making a comparison of tail risks to tail risks, I still think that the inflation tail risks have not yet reached the level of the concerns I have about the financial crisis. In particular, some important indicators—such as wages, inflation expectations, and core inflation—have not yet signaled a major shift. That being said, I do think we need to acknowledge the relative change in those risks, and we need to begin to prepare the market for the normalization that is going to have to come.

Both President Fisher and President Stern talked about the rhetorical aspects of our policy and the effects on policy expectations, and I think we are all in agreement that words mean nothing unless they are eventually backed up by actions. On the other hand, actions may be better if they are preceded by words, if you will. We do need to begin to prepare the markets and to communicate clearly so that people will know what's coming and that the system will be better able to deal with that.

If I thought for sure that we were going to begin renormalizing very soon, I would propose doing it today. Why wait? But I think enough uncertainty and enough risks are on both sides that there is some benefit from waiting just a bit longer to see, first, how the financial markets evolve and, second, whether we continue this stronger-than-expected growth pattern or whether we begin to see a more recessionary-type of pattern. In particular, between now and the next meeting, we have two employment reports, a lot of other relevant information, and a lot of insight from the financial markets. At the same time, on the inflation side, we will see how commodity prices evolve, whether we have any kind of relief from what we saw in the last intermeeting period, how the dollar behaves, and how inflation expectations behave. All those things will give us a better sense of where we are and how we should proceed.

So I think we should try to be nimble. We should try to respond to the information as it comes in. We should be focused particularly on tail risks. I think we should begin to move, or should maintain, market expectations toward tightening. President Fisher, I think I have to note for the record that I don't think we should let political considerations affect our decisions in any way, and I am not concerned about that. I think we are all prepared to do what is necessary. I don't know what we are going to do in the next meeting or the meeting after that. But my expectation now is that, as others have mentioned, we will begin normalizing interest rates relatively soon, and we should, if possible, begin to prepare the markets for that.

For today, as I have indicated, I recommend no change in the federal funds rate target and alternative B for the statement. I think alternative B captures the facts pretty well on the whole. I won't go into it, but I think the inflation paragraph is a little more hawkish. It drops the discussion of a leveling-out of commodity prices. It doesn't refer to core inflation, which we have taken before as sort of a reassuring element. I'm disappointed that President Fisher is going to vote against his own language in alternative B, paragraph 4, which we have adopted and which I think is a very good expression of the risks.

MR. FISHER. I appreciate the adoption of the language. I think it is much better.

CHAIRMAN BERNANKE. I think President Stern's suggestion is interesting. I am a little worried that it might go just a bit too far in suggesting that we have discounted the downside risks. I am struggling with the "considerable" in alternative B, paragraph 2. I have sort of heard two for and two against. I don't know if others have a view. It is a bit risky to change, given how quickly things can move. But if others would like to express a view, I think yet a third thing that we could do would be to say, "Financial markets, though somewhat improved recently, remain under considerable stress." That might be a way to address it. Does anyone have any thoughts on that word? Any concerns? President Lacker?

MR. LACKER. I thought Vice Chairman Geithner's characterization of markets was pretty good, but it is compatible with your suggestion.

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN GEITHNER. If we look back and try to recalibrate at each meeting whether things are getting better or things are getting worse, we would regret each zig and each zag. So I would just say that we have a suite of facilities in place. They are in place today. They are exceptionally significant in terms of a change in policy. They are there because we think they are playing an important role in helping facilitate the necessary process of repairing markets et cetera. If we were going to take them back tomorrow or dial them back substantially, then I would be willing to rationalize and explain that part of the judgment is that we think things are improving materially. I just feel as though the risk is too high.

CHAIRMAN BERNANKE. I think the Vice Chairman raises an interaction that I hadn't thought of, which is that our facilities are existing under the premise of unusual and exigent circumstances, and we don't really want to undercut that. President Fisher.

MR. FISHER. I would support what Vice Chairman Geithner mentioned because I think we may be faced with a situation of having to raise rates even though there is considerable risk in the financial market. So I think showing sensitivity to that is very, very important. On a second point, Mr. Chairman, I do appreciate the change in the language. I also suggested some changes to alternative C, but I won't go into them. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Yes. President Plosser.

MR. PLOSSER. Given that I suggested removing the word "considerable," my purpose there was merely to indicate, as many people around the table have said, that things are somewhat better. I don't think that we should suggest that problems are solved, because things are still under stress. I agree with Vice Chairman Geithner in that regard. I am willing to withdraw that suggestion. I don't feel that strongly about it. I thought it would have been useful to convey a direction that we saw. But I don't disagree with Vice Chairman Geithner's suggestion that these things can reverse themselves and maybe a little more stability might save us some zigging and zagging down the road. So I withdraw that suggestion. I can live with the language as it is, if that simplifies things.

MR. MISHKIN. And it will come out in the minutes.

CHAIRMAN BERNANKE. Of course, all of these subtleties will.

MR. PLOSSER. As they always do.

CHAIRMAN BERNANKE. I would like to propose no change in alternative B as given in exhibit 1. Any further comment? If not, could you please take the roll?

MS. DANKER. Yes. This vote applies to the directive as well as the language of the statement in alternative B of exhibit 1. "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output.

To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent."

Chairman Bernanke	Yes
Vice Chairman Geithner	Yes
President Fisher	No
Governor Kohn	Yes
Governor Kroszner	Yes
Governor Mishkin	Yes
President Pianalto	Yes
President Plosser	Yes
President Stern	Yes
Governor Warsh	Yes

CHAIRMAN BERNANKE. Thank you. Why don't we take a fifteen-minute coffee break, and we will come back and discuss investment banks.

[Coffee break]

CHAIRMAN BERNANKE. Why don't we commence, then. This is a joint FOMC and Board meeting, and so I need a motion to close the Board meeting.

MR. KOHN. So move.

CHAIRMAN BERNANKE. Without objection. Okay. Our topic for this morning is investment banks, their supervision, and related policy issues. Let me turn it over to Art Angulo of the New York Fed, who will introduce the topic. Art.

MR. ANGULO.[5] Thank you, Mr. Chairman. We're now in the handout. Why don't we start on page 2, and I'll give you an overview of where we are headed this morning, at least from my section. First I'll talk a bit about the objectives and the approach of our monitoring program. Then I'll talk about how we're focusing primarily, but not exclusively, on four investment banks and where our focus is there. I'll say a few words about the extent of usage of our section 13 facilities. Again, the PDCF is primarily our focus, but for the sake of completeness, I'll also discuss and provide some highlights on TSLF usage by the primary dealers. Then I'll close by just highlighting near-term issues that we're addressing or dealing with.

[5] The materials used by Messrs. Angulo, Alvarez, and Parkinson are appended to this transcript (appendix 5).

On page 3, in terms of the objectives of our monitoring program, we're very cognizant that our efforts are tied closely to our section 13(3) authority in the establishment of the Primary Dealer Credit Facility. Our effort does not stem from our general supervisory examination authority. We're very clear on that. We have two key objectives. The first is the ability to exercise informed judgment about the capital and liquidity positions of the primary dealers that have access to the PDCF. Second and just as important, we're aiming to, in shorthand, mitigate the moral hazard that accompanies the creation of the PDCF in particular. So we will make sure that the PDCF does not undermine the incentives for the primary dealers and the firms that own them to manage capital and liquidity more conservatively.

On page 4, in terms of our approach, our focus is on the firms that own primary dealers that are not affiliated with financial holding companies. That's primarily, but not exclusively, the four largest investment banks. I'll touch at the end of my presentation on several other primary dealers with which we've had interactions of late. Our effort does include an on-site presence, but that is limited to examiners at each of the four largest investment banks. We also have a small off-site staff, which includes staff members from our Research Group, our Markets Group, our Legal Group, and Bank Supervision. We are in direct contact with the management of these firms. We are obtaining information directly from the firms as well as from the SEC, and of course, we are communicating and coordinating closely with the SEC. It's important to point out, however, that we're not engaged in traditional bank supervision. Our scope is fairly narrow. We're not conducting examinations, and we're not providing or issuing examination reports back to the firms. Therefore, we are making assessments, I would say, without the normal range or normal complement of supervisory protections that we're accustomed to. To be frank, that carries with it some risk and some vulnerability for us. I'll touch on that at the end of my presentation as well. Our current focus is limited or narrowly focused on capital, as well as liquidity, which I'll get into in a moment. So let's turn to page 5.

Page 5 gives us a view of the leverage of the four investment banks. I should note that it may be a bit confusing at first glance. Leverage is typically expressed as a multiple. We've converted that into ratios because bank supervisors tend to look at ratios. So bear that in mind. Investment bank leverage does tend to be cyclical. This graph picks up really the latter half of the last cycle, so I can orally give you some perspective. If this graph had moved back to the left, in approximately 1999 to 2001 you would have seen the investment banks deleveraging in response to the Russian default and the LTCM crisis in the third quarter of 1998. So we would see leverage coming down between then and 2001. In 2001-02, leverage was essentially flat, and then this graph picks up the increasing leverage from 2004 to the end of 2007. As you can see, 2007 marked the cyclical low point in the ratio, or high point in leverage as a multiple. Since then, the firms have been deleveraging. Right now they are clustering around 4 percent, with the trajectory, I hope, still up, and we may have something to say about that.

CHAIRMAN BERNANKE. Art, could you define "leverage" in this picture.

MR. ANGULO. This is gross leverage, so it is just equity—in this case, a ratio of equity over total assets—a very blunt measure.

Page 6 gives us a more current view. In the left-hand panel is the tier 1 capital ratio for the four largest securities firms. As I think you know, the SEC has made a decision to use and hold investment banks to a Basel II ratio that's consistent with how the bank supervisors apply it. To date, the firms have not disclosed those ratios. That begins this quarter, the second quarter. For Goldman, Lehman, and Morgan Stanley, that quarter ended May 31, 2008, so we show the estimated ratios there. These were not in their earnings releases, although they were picked up by some of the analysts in their conference calls—so these numbers are seeping out there. Merrill reports on a bank cycle, June 30, so they have not yet released their tier 1 capital ratio.

A couple of takeaways from the left side of this page: First, the quarter has not ended, but Merrill was obviously low compared with its peers. They do have the benefit of seeing and being aware of where their peers have come out, so we shall see if Merrill takes some action in the near term to bolster capital. The second point is that the investment bank ratios look fairly high compared with where the commercial bank tier 1 capital ratio would be. There are a couple of reasons for that. First, the assets of the investment banks are concentrated in the trading book, so there are two issues there. Those assets tend to have a lower credit charge. The other issue, which we have to do more work on, is that we need to understand better the modeling methodologies and the model approvals that the SEC has given these firms to compute tier 1 capital. That could be a significant factor as well. So at first blush they look very healthy, very high; but I think it will take more analysis to get beneath those.

The right-hand side of page 6 gives another way of looking at capital—what we call an "FRBNY-adjusted leverage ratio." What we're trying to do here is to have another way of putting investment banks and commercial banks on a somewhat similar footing. So in terms of the numerator, we use tangible equity for two reasons. First, it's a higher form of equity capital, perhaps the highest form. Second and just as important, it avoids current differences between how investment banks and commercial banks calculate tier 1 capital. Right now there's a grandfathering period in which the securities firms are allowed to carry a higher portion of subordinated debt in tier 1 capital. It does not apply to bank holding companies. This puts them on more of an equivalent basis in terms of the numerator. The deal is the same with the denominator. Again, we're trying to make allowances for the differences in business models. So here we subtract from the denominator secured financing assets. These are reverse repos and securities borrowings. Of course, these are collateralized by cash and thus are relatively low-risk assets. So by making those two adjustments, we have a somewhat comparable view. The takeaway here is that they don't look too far apart—they are not dissimilar—at least at this point in the cycle.

Why don't we move now to page 7, to liquidity? I have a picture of liquidity, but not a full picture. This shows the trend in parent company liquidity pools. This is unencumbered cash or high-quality securities at the parent company of the four investment banks. As you can see, the trend has been increasing since the middle of March. The general trend has been to increase. This, of course, tells us only half the story because one wants to know what that pool is held against. So, let's turn to page 8, and I can talk a bit about how we're trying to look at and assess this.

We've been engaged with the SEC and have entered into an approach in trying to assess liquidity at the four investment banks. When we first started this endeavor back in late March, the first thing we did was to go back to the firms and to say, "Show us what would happen to liquidity if you experienced a Bear Stearns, full-run kind of scenario? For that exercise we want to know what assets you have eligible for the PDCF. We want to know how bad and how dark it would get." That exercise was pretty demanding. No one would have passed the test. We looked at that and asked whether a full run on the institution was an appropriate way to look at it or an appropriate standard to hold them to. So we came up with another scenario that we put back to the firms. We basically said, "Listen, we want you to do a stress analysis for us. Look at something that's pretty severe but short of a full Bear Stearns scenario. Look out over thirty days. By the way, you have no access to the PDCF. Let's see how that looks." We're in the process of doing that right now. The table on the left gives you an idea of some of the things that we're looking at and how we've asked the firms to provide the information to us. Basically there are several buckets: (1) their unsecured and secured funding; (2) what comes on the balance sheet under stress, either general market stress or firm-specific stress; and (3) the impact from operating cash flows toward the bottom. Those are the combination of liquidity claims that they would face under stress. The last piece is the additional funding from affiliated or unaffiliated bank lines along with, obviously, the liquidity pool, which we have separately. Basically, we're engaged in an exercise in which we compare and converge assumptions. We've had multiple discussions with each of the four firms, trying to understand where their assumption differed and trying to converge those. We then constructed, or are in the process of constructing, a cash flow analysis. Again, we are relating their cash needs under stress, given these assumptions, to their available liquidity pool plus the unaffiliated or affiliated bank lines that can be drawn.

The drivers here, obviously, are going to be the mix and term of secured funding, which is going to be a big driver in terms of the liquidity needs, as well as some of the operating cash flow assumptions that firms make in looking at a stress scenario. We are fairly close to pulling together information with which we can construct an analysis, go back to the firms, share with them our assessments of where they are, and give them a chance to explain to us how we were spot on or where we may have missed certain things. But those conversations will happen in the near future. So that's basically what we're doing in terms of liquidity. It has been an interesting exercise. I think that there is no simple way to look at liquidity but that this is the best way to do so.

Let's turn to page 9. I have just a few words about the use of both the PDCF and the TSLF. I have graphs later on the TSLF. A graph of the PDCF usage would be kind of boring. It would show Bear Stearns as far and away the dominant borrower. Actually I think Bill Dudley conveyed to you yesterday that Monday was their last night of borrowing under the PDCF. So Bear Stearns is now out. Until very recently there were three others that I'll call chronic users of the PDCF. First, we had Cantor. I'll say a few words about that. They started borrowing in late March, initially $600 million to $700 million. They stabilized in mid-April at about $500 million. We saw that borrowing coming in every night. Members of the team here spent one afternoon at Cantor at the end of April. We asked them for some information in advance. We spent a good chunk of time with them. We came away not being comfortable with the number or the size of their borrowings in relation to the firm's capital. We then consulted with our colleagues in both the Legal and Markets Groups. We asked Cantor to submit a plan to wean itself from the PDCF and to submit that to us in writing. We then followed up with a friendly letter from Mr. Dudley and Mr. Baxter asking for a little more information and a little more specificity. They got the point. They started to bring that down in accordance with the schedule they gave to us. In fact, they ended up winding down to zero in their borrowing last week, ahead of schedule, and they obtained third-party financing. So that was the Cantor story.

Countrywide was a somewhat similar situation. They had been borrowing from day 1 of the PDCF. Initially they would ask us for $1 billion. They had borrowed and stabilized at about $900 million. Our Markets Group initiated a conversation with Countrywide Securities at the end of May. In short, we were uncomfortable with, in essence, providing bridge financing to the close of the acquisition by Bank of America. We felt some vulnerability there. So our initial salvo or proposal back to Countrywide Securities was that they needed to wind down the use of section 13(3) facilities by the end of June—both the PDCF and the TSLF. They came back to us and in essence said, "Well, couldn't you just let us go into July a bit because our merger is supposed to be approved today actually by the Bank of America board? Our legal Day 1, our closing is July 1. We can transfer positions July 2. What's a couple of days among friends?" We had a little negotiation back and forth. We reached, I think, an agreement that was amenable to all. They agreed to wind down their use of the TSLF—no new borrowings. They could swing some of that into the PDCF. We would allow them to go until the closing, July 2, when they could transfer those positions. In return we got a little extra margin. So, in effect, those borrowings were being collateralized at a margin of roughly 7 percent. We got an additional 13 percent, bringing us to 20 percent, which will bring us through until July 2. So I think all sides are reasonably comfortable there, and with friendly persuasion, Dudley and Baxter sealed the deal there.

Let me say a few words about Barclays Capital. We handled this a bit more informally. They started using the PDCF more in late March, at around $5 billion. They got to a peak of about $7 billion. Both Bank Supervision and Markets had conversations with Barclays, asking them to tell us a little more about why they were using this. What's the rationale? They had a consistent story. They would tell us that it was economically advantageous for them to use that. They thought it was good. In one conversation with our colleagues in the Markets Group, one of the traders conveyed that Barclays thought they needed to support the TSLF in much the same way that they supported open market operations. Our colleagues in Markets very quickly disabused them of that notion. After a couple of conversations, they got the message. They eventually ceased borrowing from the PDCF around the beginning of June. So as of now, the only outstanding we have is with Countrywide Securities, and that should come to a close next week, knock on wood.

Again just for the sake of completeness, on page 10 I'll talk about the TSLF usage. First, schedule 1, which is OMO-eligible collateral—as you can see among the primary dealers, Merrill has had the highest amount outstanding. Merrill is, I guess, the tan line. The biggest users have been the commercial banks—Deutsche Bank is up top, a pretty consistent user. Then Citigroup (the green line), which has also been a fairly consistent and heavy user. Let's turn to schedule 2 (page 11), which is the less liquid collateral. Here among the primary dealers, Lehman (the blue line) has been the most consistent user, followed by Merrill Lynch. As you can see, UBS among the banks was clearly far and away the biggest user, although within the past two weeks they have reduced their TSLF borrowings. So that's, very briefly, the top five. There's again a bit of a mix here. But as you can see, the investment banks are not the biggest users of the TSLF.

Let's turn to page 12, and I'll finish up here. I'll just highlight a very near-term challenge that we face, and I think it will provide a nice transition to Scott's and Pat's portions of the briefing. I don't want to get too much into their sections. But I think generally we have an issue. I think that, the longer we stay on site with this effort, the reputational risk to the Federal Reserve increases. As Governor Kohn testified last week, we're not examining; we are just very narrowly focused. I think that message was well received. At this time, it's not too problematic. But if someone is up on the Hill six months or a year from now, I think it's going to be very difficult to say that we're just doing this liquidity and capital thing. People are going to want to know a little more about our judgments and how we made those judgments. As I said early on, I think there's some risk to making those judgments without having a little more information. So I think the trick for us is, if we have our traditional bank supervision model on the left and what we're doing right now on the right, we have to move this way, more to the left. By no means should we be way over here. But I think we have to figure out how to get this way a little more. With that, I will end my remarks and pass to Scott and then to Pat.

MR. ALVAREZ. Well, as you can tell from Art's presentation, there's been a significant amount of information-sharing and collaboration already between the Federal Reserve and the SEC. So we've taken this opportunity simultaneously with what's going on with the primary dealers to fashion a document that will lay out a framework for how this information-sharing and collaboration will go forward.

We've made some pretty good progress on a document, but we're still negotiating. In fact, the Chairman is negotiating this afternoon with Chairman Cox. This is one in which the principals have been intimately involved.

The agreement as it is currently structured really has two parts. The first part outlines plans for sharing information between the two agencies. Here I would divide the world into two pieces. There are the consolidated supervised entities (CSEs), which are the four large investment banks—Goldman Sachs, Morgan Stanley, Lehman Brothers, and Merrill Lynch. We have agreed to share information and analysis of the financial condition, risk management, internal controls, capital, liquidity, and funding resources of those firms. The agreement is focused primarily on those areas—so the financial condition, liquidity, and risk management of the firms. As you know, we have accessed information from these companies in connection with our providing liquidity through the PDCF and the TSLF, so we'll share that with the SEC. Similarly, the SEC, which is the primary regulator for those and has access to much more information, will share their information with us. We've also agreed to share information and analysis on various financial markets that these companies are intimately involved in—in particular, the tri-party repo market and the interbank lending market.

Now, two bank holding companies participate in the SEC's CSE program—Citigroup and JPMorgan Chase. We have agreed to share with the SEC the same type of financial and risk-management information regarding those two firms but only to the extent that that information affects the broker-dealers that are controlled by those two firms. So we are not expecting, nor is the SEC expecting us, to share information that relates to the condition of the bank or the condition of the other nonbank portions of either of those two firms—just the part related to their broker-dealer.

We have an interest here in the Federal Reserve in the financial condition of broker-dealers that are not in the CSE program. That would be any broker-dealer that's in a bank holding company regulated by the Federal Reserve. Our plan is to include an information-sharing arrangement regarding those institutions as well.

More broadly, the SEC would provide us with information on an ongoing basis about the financial condition and risk management, internal controls, capital, liquidity, and funding resources of all broker-dealers that are controlled by a bank holding company. This would allow us access beyond what we're currently getting. Right now we're getting primarily FOCUS reports on the broker-dealers, which are not always the most informative documents. So we'll get more access. We also are expecting to agree to provide similar kinds of financial and risk-management information to the SEC, again to the extent that the information affects the broker-dealer. So we would not be routinely providing information about bank holding companies related to the bank or related to the nonbanking operations that are not broker-dealers. We also are expecting to include a provision that outlines several existing agreements that we have for sharing information regarding some of the clearing companies—DTC in particular—transfer agents, municipal securities dealers, and investment advisers. This would simply incorporate, without changing, the arrangements we already have. An essential part of all this sharing of information is that both agencies would agree to keep the information confidential. In addition, the SEC is agreeing not to use our exam or supervisory information, in particular any opinions that we might have, in their enforcement actions or investigations without the permission of the Federal Reserve.

The second part of the agreement, as we're working through it, relates to supervisory expectations for the four large investment banks and for the primary dealers that have access to the PDCF and the TSLF. There the current proposal is that the two agencies would agree to collaborate and coordinate with each other in obtaining access to the information on the financial condition of these organizations and in setting supervisory expectations concerning the capital, liquidity, risk management, and funding for the CSEs and the primary dealers. We'd also collaborate and coordinate our communications to those entities about supervisory expectations, something that's already begun with Art and his group.

The memorandum of understanding (MOU) is intended to serve as a bridge from the existing world to whatever brave new world the Congress may put together. But it is not tied specifically to the PDCF or the TSLF and is intended to last beyond access to those facilities. It also does not change the legal authority that either of the two agencies has. We continue to have full, unfettered legal authority over bank holding companies. They continue to have full, unfettered authority over the broker-dealers. But we do agree to talk more, collaborate more, and coordinate more. As I mentioned, the MOU is substantially worked out. We are still, though, in negotiation over a couple of key points. Our goal is to have it done this week, we hope with an announcement at the end of the week or sometime next week. We expect that the terms of the MOU will be made public. As soon as we have something that's concrete enough, we'll also send that around to you.

MR. PARKINSON. Thanks. I'm just going to go over the last few pages of the handout you have, pages 13 through 15. Page 13 is just a table reminding you who the primary dealers are and providing some basic information about their size, borrowing activity, and regulatory status. As you probably know, there are currently 20 primary dealers, although as Art mentioned we're about to lose two of them—Bear Stearns and Countrywide. An important point to note, which ran through Scott's presentation, is that although the investment banks—the four firms that are subject to consolidated supervision by the SEC under their CSE program—are among the largest primary dealers, there are some very large bank-affiliated dealers, including not only affiliates of U.S. banks but also affiliates of German, Swiss, British, and French banks. Also, if you look at column 3, you'll see—and these are data that we get from the two government securities clearing banks that facilitate tri-party repo, JPMorgan Chase and Bank of New York—that it shows that the investment banks are not, in fact, the largest borrowers in the tri-party repo markets. Rather that distinction belongs to Deutsche Bank, Banc of America, and Barclays. I think that's significant because arguably the biggest threat from Bear's bankruptcy was the impact on the availability of secured financing, especially from money funds and other highly risk-adverse investors that provide tri-party financing to the dealers. So we have some very large borrowings by those non–investment bank firms. Columns 4 and 5 provide some information about how these firms are regulated. Essentially the legal entity itself in every case but one is a broker-dealer regulated by the SEC, and in that case it's a government securities dealer regulated by the Treasury but the SEC really does the enforcement of those Treasury regulations. Finally, all of these firms except one, Cantor Fitzgerald, which is an inter-dealer broker, are subject to some form of consolidated supervision by one or another consolidated regulator, although the regimes can differ appreciably. The OTS has a regime for Countrywide, I guess being a notable example itself, quite different from the one that we would apply.

So with those facts in mind, turn to the next two pages. I don't intend to go through all these questions, but what we've done here is set out some issues for discussion. Basically there are two sets, one relating to the future of our liquidity facilities for the primary dealers and the other relating to the supervisory arrangements through which we're seeking to mitigate the moral hazard that those liquidity facilities create. In each case, there are questions about what to do under current laws, until such time as the Congress may change those laws. Then there are questions about what legislative changes we might seek, particularly if the Congress shows an inclination to legislate in this area. Our purpose for this list of questions is to stimulate a discussion among you about these important issues and to provide you with an opportunity to express any preliminary views you may have. With that, I think we'd be pleased to answer questions on any of the three staff presentations. Thanks.

CHAIRMAN BERNANKE. Questions for our colleagues? President Lacker.

MR. LACKER. Thank you. Thank you, Art, Scott, and Patrick, for a very forthcoming presentation. Two things for you, Art: First, on page 8 you presented some information about the details of the stress test that you're applying, and the table lists various unsecured funding and secured funding from other sources, and you have numerical assumptions for the severity of stress. I take it that you apply those to the balance sheet numbers and do some calculations to calculate the stress test.

MR. ANGULO. Correct. We went back to the firms and asked them to give us the information cut this way because it's not readily available from any public information that we have. We also asked them to give us, under a severe test scenario, what their assumption was.

Based on the submissions that we got from the four, which we converged and massaged, we came out pretty close to these assumptions. We didn't make these up.

MR. LACKER. I was going to say that you essentially asked the question, What does "severe" mean in your stress system?

MR. ANGULO. We left it somewhat in their hands, saying that it's going to be short of a full run.

MR. LACKER. Then you had some iteration to get to an agreed-upon set of numbers for these.

MR. ANGULO. Yes.

MR. LACKER. Okay. Now, you also said that you started your first iteration by asking them to give you the results of a Bear Stearns failure scenario. What numbers does that correspond to on this table?

MR. ANGULO. You would have a lot higher numbers on secured funding. You would have the numbers coming much closer to the illiquid, 100 percent, and you would have a—

MR. LACKER. Well, wait. I'm sorry. I lost you there.

MR. ANGULO. Under fixed-income finance, for example, under the secured funding, there's liquid and less liquid. Those are 20 percent and 50 percent. Those would have been approaching 100 percent.

MR. LACKER. So the severity, that's how much of the money goes away.

MR. ANGULO. How much runs—exactly.

MR. LACKER. Okay. So do you have those numbers for Bear—what they actually experienced?

MR. ANGULO. The SEC is working on a post mortem. They have promised to share it with us when they're done. They have folks—I wouldn't say forensic accountants—in there looking at that, trying to piece together what happened. So we did not have the exact numbers.

MR. LACKER. You didn't have the exact numbers.

MR. ANGULO. No.

MR. LACKER. But you knew roughly what they were.

MR. ANGULO. Things moved pretty quickly at the end.

MR. LACKER. I see. Well, I was just interested in information on exactly how that transpired. If there's a chance that you could share with us that information when you get it, that would be very useful. A second question for you: You noted reputational risk from being in on the supervisory basis, and I want just to probe as to how you think about that. What eventualities would be risky for us?

MR. ANGULO. I guess a couple. We're saying that we're looking at the capital position. I think Governor Kohn was careful to say in his testimony that we're looking at capital in relation to near-term earnings prospects. That gives us kind of a short window, but we know from examining banks that a capital number that's reported to you depends on how you're carrying your assets. We have not done any work in trying to get behind, for example, the evaluations on Lehman's commercial real estate portfolio. That's a potential vulnerability there. Also, we have not really looked to a consolidated assessment of risk management at these firms, something we do in the bank supervision process. So we're basically taking the inputs, for lack of a better word, at face value and not doing our own work to try to validate those. That's what I was referring to in terms of the risk to us. I think as long as we're there, people expect us to be doing a little more than what we've been doing to date.

MR. LACKER. So it's essentially the risk that, after the fact, marks are questioned, and they ask, "You guys were in there—why didn't you . . .?" I understand that. Thanks.

The third question is for Pat. You talked about the repo market. My understanding is that some supervisory work under the LFI (large financial institution) umbrella is aimed at conditions in the repo market and mitigating some risk there. You mentioned that it was obviously an important factor in Bear. To what extent do you think paying interest on demand deposits would obviate the need for the huge volume of transactions in the repo market and the extent to which that legislative prohibition could have contributed to the market structures and fragility that gave rise to what happened in Bear.

MR. PARKINSON. I can't answer that, but that's a good question. I mean, the basic problem here is that you have a tremendous demand for investments that have essentially the characteristics of Treasury bills, but the supply of Treasury bills isn't nearly as large as that demand coming from money market mutual funds and from investment of cash collateral on securities lending and other kinds of secured financing. Over time, the marketplace has come up with synthetic Treasury bills of various sorts, but those short-term investments have been created outside the banking system by and large because the inability to pay interest on demand deposits doesn't allow them to be provided by the banking system. Now, if that prohibition were removed, I think you would see banks offering things that would be competing with overnight repos, overnight commercial paper, and other sorts of things that are outside the banking system that are meeting these needs.

In terms of the effects on stability, whether that leaves us in a better place obviously would depend on how good a job we do of regulating maturity transformation by the commercial banking system. An interesting question there is—whenever I hear Art give his presentation and look at these stress tests we're applying to the investment banks, even under current conditions, when they're not offering overnight interest-bearing deposits—how well our banks would fare if we tested them against these standards. But I think your observation and your question are good ones.

MR. LACKER. I mention that because it sounds as though it would be worthwhile knowing if it's important. Since we've asked the Congress twice now for permission to pay interest and they've declined, and if this was a factor in the recent crisis, we might want to point that out to them as part of our legislative dialogue with them over the next couple of months to try to get them to do something.

CHAIRMAN BERNANKE. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Just a comment on President Lacker's question: I guess in the end it would depend on how big Bear Stearns's balance sheet would have been and whether paying interest on demand deposits at commercial banks would have somehow shrunk Bear Stearns's balance sheet and the secured funding that could then run. So it's pretty complicated. It's not obvious to me whether it would have made Bear Stearns a smaller player and a less significant part of the market, but it's interesting. Tim looks as though he wants to say, "Yes, it would."

VICE CHAIRMAN GEITHNER. No. May I? You know, we think that the money funds finance about a quarter or a third of the stuff in tri-party. Money funds have a unique type of liquidity risk. So it is possible, if the same set of assets were financed by banks, that because banks have a different liquidity risk the system would be more stable. So you can maybe say, even with the same balance sheets as investment banks and the same mix of illiquid stuff financed through that mechanism, if the banks were the dominant providers of liquidity or it was provided through banks, that the system would be more stable, and the broader protections that we designed over the last century to limit the risk of runs on banks because of the risk to the system might have more power, insulating us from a system where nonbanks are large. I think that's the argument.

It would be interesting to know a bit about the politics on the Hill of thinking about that legislative change. It would probably look a little like the Middle East, I suspect. [Laughter] That would be a huge change in the relative return on different types of financial businesses that now would come with that. But it would be worth knowing a bit about the history of that debate in the past and what the probability is that we could get something like that through.

MR. KOHN. I also had a question, Mr. Chairman, and it's on the PDCF. I find some tension in my own attitudes here. Your leaning all over these people not to borrow helps protect the Board's decision that this is unusual and exigent, credit couldn't otherwise be available, and all of that. So it's supportive of that. On the other hand, it sounds really like what we used to do with commercial banks all the time and thought it created stigma in the process. We don't want you to borrow. If you come in and borrow, given that we don't want you to borrow, you must really be hurting to overcome Art Angulo's or Bill Dudley's frown. So I think the more we do this, the less useful this thing is as a backstop in some sense. I don't know. I don't have an easy answer as to how to resolve this tension.

VICE CHAIRMAN GEITHNER. Mr. Chairman, may I—not to preempt Art and Scott—in this case? I completely agree. It is very important not to undermine the value of these liquidity backstops by introducing stigma in their use until we get to the point at which we want to dial people back. But the decisions or the actions we took in the context of Cantor and Countrywide had a very compelling rationale. It would have been irresponsible for us, given the facts that over Cantor we have no comparable framework of supervision and that their exposure was very large relative to capital. In that context, we could do it without any risk that we were going to stigmatize the use of the PDCF because it's a unique thing. Countrywide, as you know, had a slightly different but similar rationale. It would have been imprudent for us to have had a substantial amount of securities outstanding, insufficiently collateralized, in the event that the deal didn't go through, because they were not viable on their own without Bank of America's buying them. That was a necessary and prudent thing to do. I think also that the risk was very limited that we introduced stigma to the facilities. The Barclays thing was more delicate. We would not say to them, "You can't use the facility." We just asked some careful questions about what they were doing and why, because their pattern of use was so different from everybody else's in that context. But I completely agree with your concern about that stuff. I think we must be very careful going forward that we don't do things that will alter this balance.

CHAIRMAN BERNANKE. President Lacker, you had something?

MR. LACKER. Yes. About the general topic of stigma and lending at our facilities, I think it would be a useful agenda item for future research, and it would be useful for us to work at thinking carefully about this. Stigma represents some information revelation to market participants attending on some act, whether it's borrowing from us or from someone else. The usual presumption is that more information is better. We talk as if stigma is a bad thing. So I'd want to see a model that lays out how the sense in which it's a bad thing counteracts the sense in which information is usually a good thing. I'm really curious about that. I think it's something we ought to think more carefully about.

CHAIRMAN BERNANKE. President Plosser, did you have a comment?

MR. PLOSSER. Yes. I asked Bill Dudley yesterday a question about what I had heard from the Street—that they perceived that stigma was attached to it. With this conversation, it certainly appears to me that I was hearing them say that, at least from the investment banks' point of view, they do feel that some stigma is already attached to it, good or bad. Now that I've heard this discussion, it is consistent with what I was hearing from those Wall Street firms.

MR. DUDLEY. May I just interject one thing on this? Vice Chairman Geithner makes the important point that one issue is counterparty risk for Cantor and Countrywide, which was sort of separate. The other issue is, since this is permissible only under section 13(3), that it can't be a chronic source of funding and it can't be part of their core funding plan. We want to make it clear to them that this is going to go away, and we want to be confident that they're not dependent on the PDCF as a source of funding. So I would distinguish between Barclays coming in occasionally with Barclays coming in every day, and that's really the point we were trying to make to them.

MR. ANGULO. It may be too fine a distinction, but we didn't say "no" to anyone when they came in. When they came in and stayed for a month and a half or two months, then we started to say "no."

VICE CHAIRMAN GEITHNER. But these are very different. I'm sorry—

CHAIRMAN BERNANKE. Go ahead. Finish your sentence.

VICE CHAIRMAN GEITHNER. I was just going to say that it's a very delicate balance. We want this set of firms to get themselves to the point where, in the eyes of the market, they have a more conservative mix of leverage (appropriately measured) and funding risk so that they are less likely, even in a pretty adverse shock, to need to finance illiquid stuff with their central bank as a defense against that liquidity pressure. We're trying to do that without forcing a level of deleveraging that would be adverse to our broader objectives of trying to get markets back to some point where they're functioning more normally. We're not going to get that perfect. By definition, our facilities by design should allow them to run with a mix of leverage and liquidity risk that is above what the market probably now would permit. In the absence of our facilities, leverage and liquidity risk, if you measured it on a scale, would have to be lower in some sense. But that's the purpose and the necessary complement of the facility, and it is a delicate balance.

But just to come back to President Plosser's point, I don't think that the stigma is the result of how we're applying the discretion we preserved for ourselves around use. It is really the result of the fact that, particularly if you're at a point when you perceive escalating concern about your viability, people don't want to risk that their pattern of use, if disclosed, would magnify the concern. That's really what accounts for the care in use, particularly as concern about viability has been intensified these last few weeks or so.

MR. DUDLEY. If I could add just one more thing, I also think that the stigma doesn't really undercut the benefit of the PDCF as a backstop to these firms' financing. If the stigma really undercut the benefit, then the stigma would be quite important. But I think that the PDCF is still a very viable backstop even with some stigma associated with it in the current environment.

CHAIRMAN BERNANKE. President Hoenig, did you have an intervention?

MR. HOENIG. Yes. To follow up on Governor Kohn's point, I think it's important to our discussion going forward in terms of how we view these firms, from commercial banks to investment banks and primary dealers, because we are lending under exigent circumstances to these institutions under the primary dealer facility. Therefore, they almost by necessity should be concerned about stigma if they were to continue to borrow through there. On the other hand, it's important because the TAF is a different instrument and has different implications going forward in how we think about it and whether we want stigma with that. I think about how and how broadly we view different financial institutions, that is, investment banks. Are they blending into commercial banks? What about beyond that? We are going to have discussions about other types of financial institutions—should they not continue to be lent to only under exigent circumstances versus an ongoing TAF type of arrangement? So I think there is stigma and probably should be unless we are concluding that they're more like banks than not like banks.

CHAIRMAN BERNANKE. We're going to have a chance, of course, for everybody to give their views. President Fisher, did you have a question?

MR. FISHER. I just wanted to get in on this point that Governor Kohn raised. I'm not uncomfortable with our being parsimonious with the Primary Dealer Credit Facility. It is under unusual and exigent circumstances, and I think we need to be sure that they are unusual and exigent circumstances. That's the reason it was created, and I think we have to respect that. I'm just wondering, judging from the decline in the extent of the outstandings and given what you described, can we assume that there's a lessening of unusual and exigent circumstances? That's my question.

MR. ANGULO. I would defer to my colleagues in Markets, but I would just give one anecdote. Over the past few weeks, in particular, when Lehman announced its second-quarter results, some observers in the market stated that Lehman might not have come through this period if the PDCF had not been there. They never drew on it. I think it's an interesting point. I think there may be some relevance, some truth, to that. Bill, you would have a better sense as to whether the markets are back to normal or not.

MR. DUDLEY. I don't think they're back to normal, and I also think very strongly that the amount of use of the Primary Dealer Credit Facility is not a guide to how important it is as a backstop for financial firms.

MR. FISHER. That's my point. That's important.

MR. DUDLEY. There were a number of people to whom we talked who said that the reason they stayed with Lehman during this period of stress was that they knew that the Primary

Dealer Credit Facility was there as a backstop. So I have a high degree of confidence that Lehman would have been in great difficulty without it.

VICE CHAIRMAN GEITHNER. Just to make sure—it isn't quite as awkward as it sounds. I mean, it's not clear. The test for us about whether or not these make sense is not fundamentally about whether the PDCF would save Lehman from itself. I would just make the observation that we thought originally that you could look at the bid to cover and at the clearing price in the auction facilities as a measure of stress in markets, and they would be a test by which you could see conditions. I think it's important to recognize that that's not itself a particularly useful prism on stress today. Independent of the specific circumstance around Lehman, the people who are funding tri-party balance sheets, for better or worse, tell anybody who listens that they're doing so significantly because of the existence of this facility as a backstop. So the use is not a very good measure of stress probably because of the stigma around it and because we're affecting prices anyway by the existence of these facilities.

We're doing as much as we can to improve the odds that these firms get to the point at which, in the eyes of their short-term secured or unsecured creditors, they look as though they can withstand a pretty large shock in the future without recourse to our facilities. But I don't think we're at the point yet where we can say that confidently, not because they haven't deleveraged sufficiently or bought enough liquidity—though there's a bit of that still left—but because there's so much uncertainty left still about the scale of pressure on balance sheets, what that might do to the losses, what that might do to asset prices going forward or to behavior. So this is just one man's view, but I think a very good, substantive case based on what you can observe and what people say about behavior suggests that circumstances are still so fragile that we could justify the provision of these facilities as a responsible, sensible act given our broader objectives.

CHAIRMAN BERNANKE. Did you complete your questions?

MR. KOHN. Yes, I did.

CHAIRMAN BERNANKE. President Rosengren.

MR. ROSENGREN. I just have a couple of questions of fact. How big was Bear Stearns's tri-party repo on the Thursday that they started getting into trouble—just to give a rough sense of scale? I know it's not exact.

MR. ANGULO. About $150 billion.

MR. ROSENGREN. About $150 billion?

MR. LACKER. That Thursday?

MR. DUDLEY. It was a little over $100 billion.

MR. LACKER. It hadn't run off that week?

MR. DUDLEY. It was starting to run off.

MR. ROSENGREN. Okay. So roughly $100 billion. The numbers seemed to be in that range. Now, one of the reasons that we're worried about the tri-party repo was that the securities in that tri-party repo were very illiquid. Was Bear Stearns unusual in the amount of illiquid securities that were being financed? As we look down this list, is the nature of the tri-party repo across these different parties similar or different? You could have a tri-party repo with collateral that would be easy to liquidate, or you could have a tri-party repo with something very difficult so that the counterparty would have a difficult time actually selling it into a distressed market. From the work you all have been doing, are there big differences or not?

MR. ANGULO. There are definite differences among dealers. I don't have the Bear Stearns cut, but we did a cut recently, and there are very clearly differences among dealers. As we know, the share of less liquid assets being financed by tri-party has been growing over the last—

pick a number—five, seven years. The trend line is going like that, clearly at a steeper or more pronounced rate than the growth in more liquid or more eligible collateral.

MR. PLOSSER. So—I'm sorry—what percentage would that be? When you say it's growing, is it now 10, 20, 50, or 80 percent?

MR. ANGULO. Pat, do you have that?

MR. PARKINSON. I have in front of me data from Bank of New York, which facilitates about two-thirds of the repos. At Bank of New York, 18 percent of the collateral is debt that's settled through DTC—so that would be non-government, non-agency debt—and another 6 percent is equity. So about 25 percent is non-OMO things. The biggest chunk by far is agency MBS. Of course, I think in extremis Bear was having trouble financing even agency debt, importantly given the illiquidity that had developed in even the agency debt markets at that time, which was the critical thing that made investors no longer willing to provide financing for that kind of collateral with a shaky counterparty.

MR. ROSENGREN. For Bear Stearns, we have one side of the transaction looking at the investment banks. On the other side of that transaction, you have companies like Fidelity, Schwab, and Federated. So as we think about who poses systemic risk, we probably want to think about both sides. In terms of a distress scenario, you have tri-party repos that are very illiquid. The clearing bank does not want to provide the cash. As a result they have to liquidate, and you have companies like Fidelity, Schwab, and Federated having to break the buck, and they don't have much capital to infuse. So just as we think about systemic risk, as you're looking at these other organizations, are there other people that you would add to that? I know for Bear Stearns that Fidelity, Schwab, and Federated played a very large role. Were there other organizations that we ought to be thinking about that would have the same kind of nature?

MR. PARKINSON. Well, the other big category that we have been able to identify of entities that are providing tri-party financing is the custodian banks that act as agents for securities lenders. When someone lends out securities, they often take in cash collateral. Then they want to reinvest that collateral, and the big bank custodians do that on their behalf and invest a portion of that cash in tri-party. Interestingly, JPMorgan Chase and Bank of New York Mellon are two of the big banks involved in that particular business. So that's another category.

I think maybe what you're getting at is about dealing with the issues of the tri-party market per se. We have to be very careful in our approach to these issues because the situation is still very fragile, and until we get out of this period of turmoil, we first want to do no harm there. But any solution can't be focused solely or even primarily on the clearing banks and the way they process these transactions, although that's part of it. It also has to focus on the behavior of the borrowers and the lenders, and the borrowers are basically all of these primary dealers and certain other big broker-dealers. The lenders are more diverse, which makes them more difficult to deal with. But I think there are certainly questions about whether they're managing their risks effectively. If you're a money fund and you're treating an overnight repo secured by illiquid collateral as the equivalent of an overnight Treasury bill, there's something problematic about that in terms of your own thinking about the situation you'd be in if, in fact, the borrower were unable to repay.

MR. ROSENGREN. One last question. Sorry for so many questions. The situation of Lehman was kind of interesting because you saw their stock price go down. Talking to financial institutions, both regulated and unregulated, in Boston, a lot of people were evaluating counterparty risk and deciding whether or not they were going to start running before the capital issue. Did your measures of liquidity pick up the amount of stress that was going on in the counterparty analysis being done, I assume, all over the country? One of the conditions for an institution's access to the discount window at a primary credit rate is that it not be rated a 4 or a 5. I know we're not doing bank exams, and I know we're not looking at all the elements of the bank exam. How confident are we, if we were to do something like that for Lehman or for Merrill Lynch, that we wouldn't rate them a 4 or a 5?

MR. ANGULO. On the first question, yes, we were picking up the pressures on liquidity. We saw some cracking, but it never broke. There were some counterparties that were skittish, but we never saw the type of accelerated withdrawals or running that came to mark Bear Stearns. We were watching it very closely, and so were they. But basically it hung together. The second question is a very difficult one. It goes back to the point I finished on, that we are somewhat vulnerable in making these assessments without having a more robust process. One way to look at it in the near term, though—again, as best we can, looking at capital—is the chart on page 6. If you look at Lehman—with its capital raise, their tier 1 risk-based capital would be 12.5 percent. There may be some range around that. There are certainly questions about how accurately Bear's capital was stated. But as a rough measure, I think it would be difficult to say that Lehman would be a 4 or a 5, looking at it from a solvency perspective. They've bolstered liquidity. As I said, it started to crack, but it never really shattered.

CHAIRMAN BERNANKE. Governor Warsh, did you have a question?

MR. WARSH. Not a question, just for the go-round.

CHAIRMAN BERNANKE. Why don't we then have an opportunity for general comments on these issues. Let me just give a bit of context. When we instituted the PDCF and the TSLF in March, about the time of the Bear Stearns event, we stipulated that they would be available for up to six months. That date, mid-September, is coming closer. It's my view, and I think others share it, that markets remain fragile, and in the case of Lehman, for example, the existence of the backup was an important support in maintaining the stability of that institution. Therefore, given the state of the markets and given that I think we still face some systemic risks, I am quite inclined at this point to ask the Board to extend the PDCF and the FOMC to extend the TSLF over year-end, which is a difficult period—subject, of course, to the continued finding of unusual and exigent circumstances. If we do that, I would ask the Board to consider that in a Board meeting, and depending on the comments today, if there's sufficient support, I would ask the FOMC to do that in a notation vote later this month.

Now, if we make the announcements that we're going to at least provisionally extend these facilities, I think it's important that we do so in the context of explaining that we have an exit strategy. In particular, we are working to strengthen supervisory oversight, market resilience, and the overall regulatory structure so that there is understanding and confidence that we're moving forward in a way that will over time make this unnecessary not only in the short term but in the long term as well.

There are several parts to the plan here. One, as Scott already described, is the memorandum of understanding with the SEC, which will provide the basis for cooperation and collaboration in the medium term for our oversight of the investment banks. Two, working with the SEC, we'd like to push forward along the lines that Art was describing, go beyond where we are now, and begin to establish a set of supervisory expectations regarding what we expect to see for the investment banks and to make sure that we have greater confidence in what we're doing and what they're doing. A third element that I think is important as we go forward is to try to improve the financial infrastructure in a number of dimensions. A lot of this work is already taking place at the Federal Reserve Bank of New York, working with other regulators and with the private sector. It includes things like improving the clearing and settlement process for various kinds of derivatives and improving risk management of derivative positions and counterparty positions, for example. It would be important for us going forward to make sure that major institutions can identify their exposure to a given counterparty through derivatives and other instruments and be able to close out that counterparty in an efficient and effective way. In addition, work is going on here at the Board and in conjunction with New York on the tri-party repo market, trying to think of ways that we can strengthen that—perhaps, for example, by narrowing the range of collateral that is normally accepted and through other steps.

So the way I would envision this proceeding would be—again, with your assent and subject to your comments—that we will announce within the next few days the MOU agreement with the SEC, which I would reemphasize is not tied to the PDCF. That is, we would anticipate that this relationship would continue even should we close those facilities, on the grounds that the moral hazard issue is still there, until such time that there is further resolution by the Congress. Second, I'll be giving a speech at the FDIC on July 8, followed by testimony on regulatory reform on July 10, when Secretary Paulson and I and others will be laying out some broad principles, including some of the issues of infrastructure, and will be discussing some of the longer-term legislative issues—for example, the issue of how we should perhaps normalize or regularize the resolution of a failing systemically important firm and, in so doing, maybe define more strictly what the parameters are for Fed lending and what our responsibility is in this kind of situation.

So to summarize, the MOU is this week. There will be testimony coming up. Presumably after the monetary policy testimony later this month, we would like, conditional on your approval, to announce the extension of these facilities conditional on continuing unusual and exigent circumstances. We would like to package that with a series of announcements concerning investment bank expectations, infrastructure, and as part of this environment as we talk about this in testimony and so on, some of our thoughts about how we might go forward in terms of statutory change in the future. What I'm trying to convey is that, although I think we need to extend these facilities, we should do it in a context of increasing clarity about how we are working to make them less and less necessary in the future. So with that as context, let me just open the floor for any comments that people might have. I have first President Lacker.

MR. LACKER. Thank you, Mr. Chairman. The issues around the liquidity facility and what supervisory apparatus we have wrapped around primary dealers have to do with our having extended our lending reach. I think there's now a substantial gap between our implied lending commitment and the scope of our supervisory authority. Vice Chairman Geithner spoke very eloquently about that earlier this month. I think it's paramount that we close that gap in order to keep borrowers from exploiting the obvious lending commitment and choosing to leave themselves vulnerable to runs and run-like behavior. But this leaves open the question of the extent of our lending reach and how we close that gap, and I think that that's the most critical challenge for us in the year ahead, particularly as we approach negotiations with the Congress.

I'd like to share a couple of thoughts on that broader question because the questions posed to us sort of get at those. It's important to start this from a peacetime perspective, sort of a timeless perspective, and ask the question as if you were choosing afresh a lending and regulatory policy that was going to last a long time. If you imagine for the moment that whatever we announce and adopt would be perfectly credible and immediately viewed as credible, I think you'd obviously choose to not have this gap. You'd obviously choose to have lending and regulatory policies that are mutually incentive compatible. So you'd want an adequate supervisory regime in place for any institution that market participants believe we'll lend to. Conversely, it means that you would want market participants to believe that we will constrain our lending to those institutions for which we have an adequate supervisory regime in place.

So then the question comes up: How do you choose the boundaries of our lending commitment? I take it as self-evident that our lending commitment shouldn't be open-ended and unlimited. We don't want to supervise every financial intermediary in the world or in the United States, much less all individuals, partnerships, and corporations. But even limiting ourselves to what's called systemically important financial institutions is going to be problematic as well. I take that phrase to mean any institution whose failure could be costly or disruptive to many other market participants. Any institution that chooses to engage in maturity transformation to some extent faces the potential for run-like behavior by the creditors. Unless we impose draconian regulations, market participants will always have a virtually unlimited capacity for creating financial arrangements that run the risk of disruptive failures. So extending our lending reach to whatever institution that makes itself systemically important just leads us down a path of ever more financial regulation of an ever larger portion of the financial system. I think we're going to have to set some boundaries. I'd like to see them tighter rather than looser, and making them credible is going to be the hard problem for us going forward.

In doing that, we're going to face a classic time-consistency problem. I take that as given. I'm not sure everyone else shares that view, but I take it as obvious. Inevitably the exigencies of crisis management are excruciating, but I think there are times when they conflict with our long-run interest in the type of financial system that we would design from a peacetime, timeless perspective, just the way short-run concerns about growth sometimes conflict with our long-run interest in price stability. But just as sustaining monetary policy credibility sometimes requires resisting the temptation to ease policy to stimulate growth, sustaining credible lending limits is going to sometimes require not preventing a disruptive failure of an institution and not ameliorating the cost of financial distress. To put it another way, I think it would be a mistake to adapt our supervisory reach to a purely discretionary lending policy. We're going to have to choose a policy and commit to it and then take hard actions to make that credible.

From this point of view, I have a deep question about the questions posed by the staff. They focus entirely on primary dealers, and it doesn't strike me that the fact that Bear Stearns was a primary dealer was what made us lend. It was the fact that it was more disruptive. I think it's likely that any other institution that presents the same threat of a disorderly resolution is going to be perceived as benefiting from our implicit lending support, whether or not they're a primary dealer, unless we say something otherwise, unless we draw a boundary, and unless we make that credible. So, for example, other large broker-dealers, hedge funds, private equity firms, or insurance companies could easily fail in a disruptive way. We need to think through whether we're going to let that happen or whether we're going to be forced to step in. At some point we're going to have to choose to let something disruptive happen.

I think that ambiguity about our lending limits would be a bad choice. Market participants are going to form their own views about the likelihood of us lending. Any lack of clarity about the boundaries is just going to lead some firms to test the boundaries, and it's not going to help us resist the temptation to lend beyond the boundaries we want to establish. Besides, Mr. Chairman, you've emphasized the value of de-personalizing and institutionalizing the conduct of monetary policy. It's important that we strive for lending policy that isn't critically dependent on particular officeholders. As I said, I'd favor fairly tight limits on our lending commitments, and you are probably not surprised about that. I think we really ought to maintain this section 13(3) hurdle at a fairly high level, but the exit strategy makes me nervous. Crafting this MOU, a permanent shift in our visibility into and in our ability to protect the system from primary dealers, is just going to sustain the expectations that have arisen since Bear—which have been described and referenced a couple of times and which you see in the fall in CDS spreads for those institutions—and it is just really hard to see how to put that genie back in the bottle and limit the extent to which we're viewed as backstopping them. But I think we ought to strive to make that somehow be viewed as unusual as possible.

More broadly, my reading of the history of economics and financial intermediation is just my reading. But I'm motivated broadly by the sense that we'd be better served in the long run with as small an extent of central bank lending commitment as possible. Central bank credit is fiscal policy. It entangles us in politics. It risks compromising the independence of our monetary policy. You've heard me say this before. Expanding our lending forces us to extend our regulatory reach, and that can't be good for the financial system even though I trust our staff to do a very good job of being as efficient and effective as they can be. I've argued this before. It's not obvious on the evidence that our financial system is terribly fragile apart from the volatility induced by uncertainties about government and central bank policies. Besides, I think that we should take seriously the notion that some amount of financial instability is undoubtedly optimal, as work by economists such as Allen and Gale has demonstrated. Those are the kinds of considerations that I think ought to guide our policy.

Finally, Mr. Chairman, a word about process. At our last meeting we discussed interest on reserves, a historic and consequential decision for us. We had a briefing package of 100-plus pages reflecting substantial staff work. The Committee very much benefited from that. At an upcoming meeting we're going to talk about inflation dynamics, another consequential topic. We've received somewhat less material, even going back several months, about financial markets, their character, and the welfare economics of our interventions. I'd urge you to consider a special topic at some future meeting at which we explore the economics of financial stability, since it is becoming such a consequential part of what we do. Related to that, I was happy to learn from Art that an after-action review by the SEC was under way. Because our role is different from the SEC's, I'd like to suggest that maybe building on that or maybe in parallel to that we conduct our own after-action review of the factors that went into how that event played out. Thank you very much, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. I agree with you that we need to define limits, but I think we have stronger tools than just our declarations of piety. I would just note that there are models. One good model is the FDICIA model, for example, which lays out a whole set of criteria under which intervention can be taken and, if intervention is taken, has a set of rules. There are ways through the legal structure to solve some of these problems without our necessarily having to make time-inconsistent promises.

MR. LACKER. I agree, and those are mechanisms for legislatively tying our hands, and that ought to be high on the agenda.

CHAIRMAN BERNANKE. We'll discuss those. Yes, President Plosser.

MR. PLOSSER. On that point, I have been reading a bit recently. It might be useful in thinking about some of these issues about how we tie our hands and the mechanism for doing that. The IMF went through an extraordinary study effort during the sovereign debt crisis and came up with some very important mechanisms for how to change the contracts that were being written by sovereign countries so as to avoid the IMF's having to step in and look for other solutions, which is, I think, along the same lines. I don't know whether or not there are things from which to learn in parallel with that to think about how we approach that issue.

CHAIRMAN BERNANKE. President Rosengren.

MR. ROSENGREN. I have three comments for the long term and three comments for the short term. For the long term, in the tradeoff between focusing on markets versus institutions, to the extent that we can have standardized products traded on exchanges, we don't need to spend as much time with institutions, and that takes care of a lot of the counterparty risk. To the extent that the products have to be customized and done in dealer markets, then we have counterparty risk and that becomes an issue. So I applaud what the New York Fed is doing with the credit default swap market in thinking about a way to more systematically reduce counterparty risk. I wonder if we should more forcefully be trying to push it not only to a clearinghouse but also maybe to exchange traded. I know there is a tradeoff between standardized products and nonstandardized products. But if we can get things to be more standard so that they can trade on an exchange, we won't have to spend as much time talking about some of the issues that we've been talking about. Not just a credit default swap market has that characteristic. So if we can push a number of areas in which there's counterparty risk into an exchange, then we can get out of the business of focusing on all the institutions.

The second point is that there's a broader role for us as a holding company supervisor. When I look at this list and look at Countrywide, it's not because they're a primary dealer that I would be focused on them. It's because they were 20 to 25 percent of the residential mortgage market; they were a very large player. The OTS has holding company supervision over them. We ought to ask ourselves whether now is the time to think about what organizations we ought to have holding company responsibility for. The OTS has WaMu and had Countrywide. We ought to give some thought to that. Now is the time to think about whether or not that's appropriate and push for it if there are going to be legislative recommendations. In terms of broker-dealers, I think the same thing applies. I don't think that we should be the primary regulator for these organizations. But if we're going to be lending to them in exigent circumstances, having holding company regulatory authority does become important.

The third point is that, when you look at this list, there are a lot of foreign institutions. One insight that we've gotten is that an organization as big as UBS could potentially fail. That may not be something that we thought was very likely nine months ago, but it is obviously more likely now than we would have anticipated. Foreign organizations can either establish themselves as a branch or have a domestic holding company. To the extent that foreign supervisors decide to wall off their organizations around their geographic borders and say that, if there is a problem, we're not going to support institutions that are in the United States and you're on your own, I think we need to revisit some of our rules on how much capital we expect foreign holding companies that are intermediary holding companies to hold. We might also want to think about, if there's a lot of activity being done through a branch that has no capital supporting it, how concerned we should be about that. Should we be taking actions to make sure that, if the foreign parent decides that they are going to abandon the branch, we feel very comfortable with that outcome? Given the list of the primary dealers, I think the numbers are fairly large, larger than they were for Bear Stearns, and that's something that we probably should give a bit more thought to.

On the short-term issues, I certainly think that we should extend the facilities past the end of the year. That makes perfect sense. A number of us have made the point that the markets are still fragile. Just the announcements about Lehman Brothers over the last month highlight that we're not yet safe, and I think that it makes perfect sense to extend through the end of the year because there could be an end-of-the-year financing problem this year. Second, narrowing tri-party repo collateral also makes sense. But it has implications for what securities people hold, and some of those markets may become much more distressed if we announce that they no longer can be part of a tri-party repo. So we need to give some thought to whether there will be collateral damage and to the unintended consequences from that. Third, I agree with President Lacker that primary dealers wouldn't be where I'd focus. I'd focus on systemically important. That would be key players and key markets whose failure might cause a cascading of counterparty failures. I think we ought to start with that premise and which organizations fit into that category. Some of them will be on the primary dealer list, but they are on the primary dealer list for a reason very different from the reason they are systemically important. So maybe distinguishing between those two would be useful.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Mr. Chairman, on the short term, I think extending through the end of the year is prudent and would support that. I would say that the possibility of its naturally dying off would be ideal. I would support that because it is "exigent circumstances." We should make that clear and work these people out of it as quickly as possible.

On the longer-term issues, I share the view of a lot of what President Lacker said. A couple of things: I'm very uneasy about extending our lending and supervisory authority to these institutions on the basis of systemic risk. The banking industry has been under our umbrella, importantly around transactions activities—that is, payments—and how important they are systemically. It's clear, and a line is there. Beyond that, it is size that's systemically important. If we extend this and institutionalize it because we've had this emergency and we've used section 13(3), then I have to ask what will happen when the next Long-Term Capital occurs that's larger, more complicated, with a lot more interaction that will affect the markets globally. What will we do? To what then will we extend ourselves in terms of supervisory oversight, memos of understanding, agreements for the group of hedge funds that aren't regulated, and so forth. So I think it's important that we focus on the fact that this is an emergency and that we go back to "exigent circumstances" in the future for these institutions so that we have clear boundaries on that. I think it has served us well and will continue to serve us well. Then we use our best judgment in exigent circumstances and very sparingly. I think that's a lot of what President Lacker said, so I won't repeat everything else, but those are the concerns that I really do have going forward.

CHAIRMAN BERNANKE. Thank you.

VICE CHAIRMAN GEITHNER. May I make a suggestion?

CHAIRMAN BERNANKE. A suggestion?

VICE CHAIRMAN GEITHNER. Yes. You know, these are deep, consequential questions we face. This is a question on the economy, and we're not going to resolve it today. I think it's important that we recognize that we're going to have to build some time into our agenda—later this year probably, certainly early next year—and get deeper into the basic question about what we are for in the future. What amendments to the Federal Reserve Act, if any, would we support? What would we resist? What mix of these things? That's important because we're not going to do an adequate job of getting ourselves on the table on those actions today. We are going to need to be very careful that the stuff we're doing in the here and now doesn't prejudice those decisions long term. Again, I think the package that the Chairman laid out and the strategy we have are pretty carefully designed to mitigate that risk. We're trying to be very careful that we're preserving full optionality, once we get through this particular period, to go on any of the paths that are ahead in this context. Of course, this short-term stuff is vulnerable to the risk. It looks as though we're prejudicing some of those choices, but I think we're trying to be careful not to do that. I just wanted to make the point that we're all going to need a little time to think through this stuff, and we're going to need some time to come back and talk about the deeper policy questions that we face in this because they are very consequential. I have a lot of sympathy for all the concerns that are on the other side of where we are today.

MR. HOENIG. I would very much like to see us make that happen sooner rather than later just because of the force of events taking us forward.

CHAIRMAN BERNANKE. That's right. Because of testimonies and so on, we are going to have to at least enunciate some broad principles, and that is why this discussion is very useful. Obviously, details will be worked out over a longer period. President Bullard.

MR. BULLARD. Yes, I just have a few comments. In reading through this memo and hearing the presentation this morning, I think that these are fantastic questions. They deserve a lot of research and analysis. Just to echo Vice Chairman Geithner, they cannot easily be answered in a forum like this one. What is happening is that we start out looking at these questions, which just spawn more and more questions; so we end up with an even longer list of questions. The short-term strategy seems perfectly reasonable, somehow tied to an exit strategy maybe next year. So I didn't have any problems with that as outlined by the Chairman.

When we get down to approaching a more detailed analysis of what we want to do overall, it brings up very difficult questions of what the optimal regulatory environment is. I think that we all think the regulatory environment in the United States is not optimal right now. Also, in a world of increasing globalization, it is not so clear how you should set up your regulatory structure. This is a once-in-a-generation chance to possibly reformulate the regulatory structure. I wouldn't hold my breath on that. I think the Congress does not have a great record of dealing with issues like this. These issues are complicated, and it is very hard to get agreement on them. But you would like to have a benchmark. I think that one is out there in the economics literature about what that environment should look like. That is what we could possibly work on over the next nine months or so.

Then I have another comment. When we are evaluating these programs, we have to think about whether these programs have been effective and to what extent. How do we measure success? One of the comments earlier was that the mere existence of the programs might be success in some sense. In a model, that is going to work. Even if you take it out of existence, because the market knows it's there and you can put it back into existence in the future, it will have exactly the same effect. Whether or not you have the program in place, the equilibrium is going to be the same in a lot of models, so the effects would still be there. If it is just the potential of putting the program in place that is considered successful, then maybe it is not critical whether it is in place but priced not to be used or whether it is actually taken out of existence temporarily.

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. Mr. Chairman, I am in favor of keeping these facilities open through year-end as you have suggested. I think that just the existence of the PDCF is important, which we talked about earlier, and your overall outline of an approach, the topography of that approach, is attractive. The question I have is about—and you used the term—"supervisory expectations." I have a question for Scott, and then a thought to follow up on. Since, Scott, no one asked you a question, I want to ask you a question.

MR. ALVAREZ. I was perfectly content to get through this without any questions. [Laughter] But I am happy to answer anything.

MR. FISHER. In working up this MOU, have you had any interaction with Chairman Frank or any of his staff, getting a sense of how they might react or what it does in terms of their own expectations?

MR. ALVAREZ. Well, we have had a bit of interaction on the Senate side. The Senate folks are very interested in what we are doing and whether this would preempt a congressional action. Chairman Frank has been more sanguine about our doing what is appropriate to deal with the situation now—Laricke may speak to this more at the lunchtime conversation. But we are building on existing authority. We are not expanding beyond the existing framework. We are agreeing to collaborate more, work together more, but we don't gain any legal or statutory authority through this MOU. We gain some admission because we are standing next to the SEC. We expect that the primary dealers and CSEs will be more willing to talk with us because we are with the SEC. But in the end, it depends on voluntary cooperation by all.

MR. FISHER. Are you picking up any signals in return, in this interaction with the Senate or elsewhere, about what they might be thinking? Are we picking up any other signals that might be of concern?

MR. ALVAREZ. On the House side, Chairman Frank is thinking of a model that is similar to what the Treasury blueprint outlined, where the Federal Reserve would be a systemic regulator and have some authorities that go along with that. I think that on the Senate side they are very much in disarray. They want to visit this issue, but they haven't figured out exactly what point of view they want to have.

MR. FISHER. I am a little confused. You testify in July and then have a speech. You said that you and Paulson will be speaking. I think that is a very important point. It is going to be a tough act because you don't want to take anything off the table, but you want to keep a lot open and not show your hand. Well, we don't know what our hand is yet. You may, but I don't think we have it as a group. So we can't really show our hand. Anyway, I don't know how this is going to be prepared, but I'm sure there are lots of feelings around this table. This is the substance that Vice Chairman Geithner referred to earlier—these very, very important questions. But you are going to have to show some leg during that speech. Obviously, this is a Board issue, but with regard to the FOMC, I would just ask that it be fairly carefully vetted.

CHAIRMAN BERNANKE. I was planning to do that.

MR. FISHER. Yes, sir. Just for some suggestions, for whatever they're worth. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Thank you, Mr. Chairman. Just a few points. With regard to the short-term plan of extending the facilities over the turn of the year and so forth—that is, the MOU and the testimony that goes with it—that is all fine with me. I don't have any problem with that. That sounds sensible under the circumstances.

A number of important points have already been raised. I won't reiterate all of them. Maybe the one that caught my attention most completely was President Lacker's point about credibility. Whatever we go forward with obviously has to be seen as credible, and as he pointed out, it is important that at some point, to limit our involvement in supporting institutions and markets going forward, we may have to be prepared to let one large institution fail. The reason, of course, that we are very concerned about protecting them over time is the spillover effect. As I have said many times before, where we need to concentrate our efforts—not necessarily exclusively, but certainly in part—is in devising ways to limit spillovers. That is all about preparation—the analysis and so forth that goes with it—and it is all about communication—that is, putting uninsured creditors on notice that the regime is in fact in the process of changing.

Now, having said that, I don't mean to suggest that it is easy. I don't mean to suggest that we will get it 100 percent correct. But if we don't do those kinds of things, then statements about boundaries aren't likely to be credible. They are just going to be, well, you guys wish it were this way, but you have section 13(3), and we know it's there, and we are going to act accordingly. So I think it is very important, as we go forward with this, that we focus some attention exactly on those areas.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. I will be very brief, Mr. Chairman. I do want to say, with respect to the short-term issues, that I fully support the plan that you laid out. I certainly favor keeping these facilities in place beyond September. Even if their use diminishes, I agree with the point that it doesn't necessarily indicate that they are not playing a tremendously important role. The ramping up of our oversight of these institutions in the agreement with the SEC is a very important part of continuing these facilities.

On the long-run issues, it is a wonderful list of questions. I don't know the answers to the questions. I think we really need to dig in very rapidly and do serious work on them. They are fundamental. President Rosengren raised a list of issues about this, the same ones that have been very much in my mind. What institutions? It is not obvious to me that the right list of systemically important institutions is the primary dealers. I think someone—maybe President Rosengren—raised the issue of Countrywide, a huge mortgage company. I certainly worried last summer that it had created systemic risk, and it is not just the primary dealer there. I also think there is an issue with respect to hedge funds, similar to those that arose with Long-Term Capital

Management. This raises very troubling issues to me about our trying to identify and take on supervision of all systemically important institutions. This is a very tough issue that I don't know the answer to.

But also, what is going on raises fundamental issues about how we conduct consolidated supervision. Even if all the systemically important institutions were primary dealers or mortgage companies within bank holding companies that currently we do have umbrella supervision over, I am not at all convinced that the way we are carrying out supervision now would have prevented a Bear Stearns-type of episode within an institution that is currently solidly under our supervision. Last summer I was pleased in some ways that we had lost direct supervision of Countrywide to the OTS. But it might well have been in our domain—six months earlier it would have been—and it could have created a systemically important problem if it had failed. So just the nature of how we carry out this Fed-lite approach, is that really the right way? I see us as very focused on process in our supervision of holding companies. We don't do a lot of transaction testing. Obviously, this raises very fundamental issues, even within our existing domain, about how we carry out comprehensive umbrella supervision. I don't have any answers, but we clearly need to get on it quickly.

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. I will be very brief. A lot of my views have been shared already. Just to expand on President Rosengren's comment—how we define the right institutions, the scope of this, I think that some of the questions here are really hard. It is my understanding that the workgroups we talked about last time are going to be working on some of these things, and we need to get those well under way to help us define these problems. On the longer-term problem—Vice Chairman Geithner made this point, and I just want to reiterate it—it is really important in the short run that we not do things that constrain our longer-term options. It is a very slippery slope that the long run ends up being transformed into a series of short-term steps, and by that almost inevitably you end up in places you don't want to be. So I just want to make sure that we stay abreast of that and not let that happen to us—that we find ourselves six months from now in a position where, gee, we wish we hadn't done that. So I just wanted to stress that again.

I'm fine with extending the facilities through the end of the year. I don't have any tremendous problem with that, although I have always been a little puzzled by "unusual and exigent circumstances." What does that really mean? How do we define that? It would be a lot easier for me to think about when to take it off if I knew what the criteria were for putting it on. It would be helpful to me, anyway, if we could work on defining those criteria a little more rigorously. I know there will be judgment involved in that at the end of the day. I don't disagree with that. But it would help us to define what we mean by that because it is going to be really hard to define what we mean by a "systemically important institution." I am not sure I know the answer to that. I think it is a very difficult question. So I am okay on the short run.

I will just reiterate the other point that President Stern made about the issue of credibility and commitment. You know, I have talked a lot about this over the last couple of years regarding monetary policy. It applies equally well in this framework. Figuring out ways to implement our policies, whatever they may be, in both a time-consistent and committed way, and defining those boundaries and how we live up to them, is a really hard problem. But I don't think we can avoid dealing with it, and it is going to be a critical piece of how we think about the longer term. I will just leave it at that.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I also support extending our lending facilities to get through the year-end funding problems. As many others have already said, I agree that we should undertake an evaluation of the changes to our emergency liquidity facilities. I think it is important that we do it more broadly and that we don't do it in a piecemeal fashion. How the pieces fit together matters greatly. Any extension of Fed authority to provide routine liquidity support beyond insured banks should be something that we consider as part of a comprehensive regulatory and financial safety net reform. My own view may be that I prefer a narrower lending facility than I think was envisioned in some of the documents that we received, but I do think that the top priority is to have a well-thought-out, documented plan for how we move forward. That will help us address some of the moral hazard issues that we have been concerned about. I think it will avoid our having to create any new institutions or new facilities to respond to future crises. I also think it will help better define some of the boundaries. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thanks, Mr. Chairman. I have maybe a variation on Governor Warsh's comment of yesterday: Much has been said by many, so I will try not to take too much time here. I think Vice Chairman Geithner's admonitions are correct, and I certainly support them. I am quite supportive of extending through the year-end, and the short-term plan that the Chairman laid out seems quite sensible to me.

I don't have well-informed or well-thought-out answers to the more detailed questions that were posed in advance of the meeting. I didn't devote the time to study them in any depth. So let me take refuge in some sort of high-level comments. A number of people around the table have been expressing overview types of comments. I see the touchstone of all of this to be our perceived accountability for systemic risk and financial stability. There may be, in the context of legislation, regulation, and so forth, limits to that; but I think that we are largely perceived as the most accountable party. I have to ask myself, Do we have a system today that is aligned with the reality of the financial markets? Or, put in more vernacular terms, do we have the right stuff to do what we need to do to take responsibility as best we can for financial stability? My answer to that is "no." I don't think we have the right stuff. I think the answer to that lies in working out the details of what the right stuff is. But the reality is that financial markets are not bank-centric any longer, with the widely discussed shadow banking system, including hedge funds, a complexity that is not going to go away; international integration that is not going to go away; very, let's just say, compelling economic and financial reasons for off-balance-sheet treatment of various kinds of things; and on and on. We could make a long list of what that reality is. To me, and I have been kind of dwelling on this for some time, that is a reality that is likely to continue. It may take a couple of steps back, but it will continue to develop along certain lines. Do we have a system that is aligned with it? The answer to that is "no." So if we can take care of the short-term plan and then buy the time over the next several months to hammer out what we think is the best possible thinking opposite that reality, then that is what I believe we need to be doing. So thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. I will also try to be brief, in spite of the large number of questions that were handed out. The short term should be quite easy. On the tactical issues, I agree with the suggestion of extending the facilities through year-end. They seem to have worked well. Also, a number of very interesting and important initiatives are ongoing as well on the CDS over-the-counter market and tri-party repo, and those should help out as well.

On the longer-term issues, I am very happy to hear that you will be giving a speech and testimony on this, and I will be looking forward to how you lay out those issues. Obviously, there are large-scale changes in our regulatory environment that are being contemplated. These happen only every now and then. It is an opportunity to improve or to make a tremendous mistake if we are not very careful. So I think it, obviously, requires a tremendous amount of time.

People have talked about the various issues, so I won't dwell on them. I think there have been a lot of very good comments around the table and speeches that have laid out the important issues that we are facing. One that I am sure we will have to talk a bit more about is that we can't think about this in a static environment. Obviously, the markets are very dynamic. As soon as we lay out a structure that will help out certain types of institutions, then there is going to be an opportunity to arbitrage that. We are presumably talking about reducing earnings of a number of institutions, and so they will be seeking those out. Another way to characterize the big question—it is nothing new—is how we maintain the incentives for market discipline. Many of the comments that President Stern and others made about how we think about preparing for possible resolutions will be very important. So I am looking forward to many more discussions about this. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I think I would just like to dig into some of the comments that President Lockhart and President Evans just made, just for a second, take a step back, and ask why we are here having this conversation. I know the timing is because we have this PDCF, but what happened was that the financial markets evolved in such a way that simply having a liquidity backstop for commercial banks was not sufficient to protect the economy from systemic risk. I myself have been very surprised—I will be very open about this—at the persistence, the extent, the depth, and the spread of this crisis and how long it went and what it covered. Every couple of months, I thought it was about to be over, and then another wave would come. I think that we have learned something about the financial system in the process, and we have learned that the regulatory structure and the liquidity provision structure were not sufficient to give the economy the protection it needed from the new style of financial system. That is really the background of why we are here, not just because we made the loan or we set up the facilities because we thought we needed to do so to protect the system under the circumstances.

I completely support, Mr. Chairman, your suggested path forward for the near-to-intermediate term. I think that is the right way to go. I would say, relative to the two senators that I testified in front of last week, that they were very supportive of the memorandum of understanding between the Fed and the SEC and particularly supportive of the efforts that the Federal Reserve Bank of New York and the other regulators are leading to strengthen the infrastructure of the OTC derivatives markets. We didn't get into tri-party repos, fortunately. But I'm sure they would have been supportive of that, too.

I think everybody has raised very good questions about where, in this new financial system, you draw the boundaries. What do you need to do? There are no easy answers here, and I look forward to coming back to this. My going-in position is that our liquidity facilities outside of commercial banks ought to be available in systemic circumstances, not in just any circumstances, and they ought to be available at this point to just broker-dealers or investment banks. I would hesitate to get outside that realm. Those guys are already regulated, and so what we're talking about is strengthening the regulation. I think that we can strengthen the core of the system to make it resilient to things happening outside, but I am not totally dug in on that. So I look forward to more discussion. It is going to be very hard to draw the line and make it credible. I agree, partly this will be defining what we mean by "systemic," but I don't think we will ever really get to the point of having a bright line around that. It will always need a great amount of judgment, combined with—as you said, Mr. Chairman—a process by which you make that decision, to help limit the moral hazard. Crises are always difficult. You get into a crisis, and the near-term costs are much more palpable than the long-term costs that might be there. So it is always hard to say "no." We have said "no" in the past on certain circumstances. Drexel is the obvious example. Markets were a little stressed. There was a little disorder. It was fine, but it was a very different circumstance. I think that completes my remarks. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me make a few prefatory comments, and then try to answer a couple of the key questions in the memo. First, a crisis is a terrible thing to waste. My sense is that we have an opportunity here to do the right thing over the period to try to get market discipline—to Charlie's point—back and vibrant and working countercyclically with regulatory discipline and capital standards. So this is an opportunity. As we contemplate our six-months-and-a-day problem, what do we do between September and year-end? I agree with Vice Chairman Geithner's comment that we need to keep options open, and I will make a proposal in a moment for how to do that.

Second, the memo from the staff said that improvements in financial markets have resulted, importantly, from the availability of the special liquidity facilities, and I agree with that. But I wouldn't give short shrift to the other things that have been going on in the markets that have improved market functioning. I don't think it is fair to say that we deserve a disproportionate amount of credit for what has happened. We have seen a ton of capital-raising. We have seen a lot of diversification of funding sources. We have seen changes in duration by financial institutions. We have seen improved disclosure and transparency. We have seen big write-downs. We have seen brutal changes in management teams. We have seen pairing of business lines and improved risk management. So it strikes me that market discipline is alive and well. It was necessary for us to do what we did, but I think it hangs way too much on our facilities if we suggest that we are the only thing that is keeping the system together.

As a final prefatory comment, the memo says that some investors have indicated their willingness to lend to primary dealers in recent months, and that has been conditioned on dealers' access to the PDCF. It strikes me that proves too much. I am not sure that is a good thing. The concerns we have late in the cycle, when we look back, include that market discipline broke down. In the short term, obviously, we want to see some of the money market mutual funds from President Rosengren's neck of the woods hang in there with these institutions so we don't have a sort of panic coming. But over the short to medium term, we want the guys in money market mutual funds to recognize that, when they are providing funding overnight, they are making an investment decision that has a risk. So I hesitate to suggest that we want to do things over the period that let them be complacent. We want to do things that make them very focused on the decisions they are making.

Now a bit to the key questions that were asked in the memo. First, on liquidity facilities, on the question of the PDCF and its symmetry with the TSLF, I like that notion of the balance of having an auction and having one that is available more regularly. But we have to recognize that the PDCF, whether intended or not, has been stigmatized. If Lehman Brothers, when they were on their darkest day, had answered the question differently, I dare say they might not be in existence. They were asked, "Have you accessed the PDCF?" The answer was, "Absolutely not." If their answer to that had been "yes," I suspect that they and we could have been in a very different circumstance. So what does that prove? I think that proves that the existence of these facilities matters. It keeps institutions in the game. The particular terms matter less. But also, in extremis, accessing that facility, unlike the securities lending facility, causes losing a considerable amount of control over one's own fate. So I think we have to take that into consideration.

We have considerable leverage over these institutions at this time. No matter what they and their lobbyists say, they want us to be their regulator more than they can possibly contain themselves—mostly for our credibility and mostly for our balance sheet. I worry that if we extend the PDCF as is by just punting it down the road some months, we will lose some of that leverage. So one idea, which I must say I haven't explored as much as I probably should, is extending the PDCF, not as is but by modifying it in a way that would make Bagehot proud—by making it more expensive, by widening the spread. Now, there are other things we could do in this short-term extension that modify its terms—changing collateral or changing haircuts. But it strikes me that price might be an interesting way to say, "Listen, we aren't pre-judging outcomes, but you can see from this move that we aren't comfortable with the status quo, and we are asking ourselves these very hard questions that we brought to bear." That could send an important signal, which I don't think would be overly disruptive to the markets if we explained some of the rationale for doing it.

Let me turn, finally, to the prudential supervision questions. I have a note here in answer to the first question, "How do we limit moral hazard if we continue the facilities?" My bold answer is "carefully," so I guess not much is there. On what principles should supervisory expectations be based? I think Art talked rightly about these different regulatory frameworks for the big money center commercial banks and the investment banks. We'd be doing ourselves a disservice over the period, Mr. Chairman, to take the regulatory regime that we have now had for a long time for these big complex commercial banks and try to put it on the investment banks. I'll answer this the way I began. We have an opportunity to start with a blank sheet of paper, with four institutions over the period, and figure out how to be really, really good regulators, building on the lessons that we have learned from our traditional supervision and regulation function. I think that we would be making a mistake by saying, "We have a model, and let's throw it on these guys." If we regulate these four institutions the way we have long been regulating commercial banks with the OCC and others, I think we won't have maximized the best of regulation. The goal would be to figure out how to regulate these four right and then, frankly, to export those lessons to what we have long been doing to make regulation better and stronger across this group. If it turns out that we do to Goldman Sachs and Morgan Stanley what we have been doing to Citi and JPMorgan, as was suggested, we will find other people will be in the business of investment banking, so we won't have done terribly much to mitigate systemic risk.

Finally, on the question about the role for the Congress. Both in the medium term, Mr. Chairman, in the context of your speeches and as we get toward the end of July, when you announce some modification—if the FOMC agrees—about these facilities and the PDCF, it is very important that the Congress be given serious responsibility for this. It has been very easy for them to criticize, on the one hand, and to whisper to us all their support, on the other. I think they need to be given very important homework assignments in terms of what they can do.

Some form of FDICIA with investment banks might be one example. Wrestling about these issues in terms of regulatory organizations strikes me as very consequential. Even if we could convince ourselves that we have all the regulatory authority to figure this out with our regulators, we would be better off, when we are ready and we have the right answer in our own view, to bring it to the Congress for final clarity and to get their imprimatur. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Kroszner.

MR. KROSZNER. Thank you very much. I agree with a lot of what Governor Warsh said and a lot of what has been said before. Let me just take a slightly different tack answering the question that Governor Kohn raised: Why are we here? Part of that is, because of the Glass-Steagall Act, we have this unusual structure in the United States. Other central banks can provide credit much more easily to a wide variety of institutions. We have a legacy that created this separation, which isn't as strong in most other countries. In continental Europe, for example, you just don't really see this. Then, we have built a regulatory regime that helped to promote that. Remember, the discussions have been about markets and the challenges in the markets. Well, I think our regulatory regime, not just in the United States but throughout the world, helped promote the disintermediation to promote greater reliance on the markets. In certain ways this is a very good thing, but it creates exactly the kinds of problems and challenges that we are facing now.

I think we need to be mindful of that and take that into account when we are thinking about what to do next in dealing with these issues. Thinking about market resiliency and market infrastructure is crucial, but we also have to be mindful that, if we try to get things to migrate to the exchanges, to clearinghouses, et cetera, it is great for us as regulators, and it is also useful because the information is much more centralized. But it also could create market dynamics, as

President Evans said, that could lead to trying to get around that. Then the risky stuff goes OTC. The risky stuff is in new institutions that we haven't thought of yet. President Yellen mentioned some other institutions. We can mention hedge funds and money market mutual funds, but in five years there may be institutions that we haven't even thought about. No matter what structure we set up, there would be ways to try to get around it. So we need to think about a regulatory regime that gets the costs and benefits right to make the different relevant institutions not bridle too much at being part of it and so to rethink the financial holding company structure. If the investment banks had found the financial holding company structure an amenable one, then we wouldn't be here either because we would have solved the Glass-Steagall legacy problem. But we haven't quite done that.

So actually exactly as Governor Warsh was saying—and believe it or not, we didn't coordinate beforehand—I think that we should think about how to revise our general regulatory structure to get more institutions under this umbrella, not have them find it scary, upsetting, or disturbing but to see that we are doing it in a reasonable cost–benefit way. I can see just in all the issues that we have been facing regarding some capital relief in particular circumstances—so-called 23.80 relief on particular types of transactions, issues of what's included in the definition of a leverage ratio. I think it gives us an opportunity to rethink why so many institutions find it onerous and are so lacking in desire to be part of this regime. Obviously, there is some regulatory competition—President Rosengren, I think, brought that up—so we need to think of that as a whole. This is part of the homework assignment that the Congress needs to think about—setting up a reasonable FDICIA-like regime for a broader set of institutions that would choose to come and be regulated by the Fed.

We have been talking about where the bright lines are. But if we okay someone to be a financial holding company, then they become part of our regime in the existing structure. So the lines aren't completely carefully drawn. It really is sort of a cost–benefit analysis if someone chooses to apply. So we need to think about that carefully and about the costs and benefits of getting people in because the long-term dynamics will be that people always try to get away from regulation unless they see that there is some sufficient benefit. Being very mindful of that, both from the institution context and the broader context of the markets, is very important. Thank you.

CHAIRMAN BERNANKE. Thank you.

MR. KROSZNER. Oh, and I apologize—I fully support going ahead with extending the facility past the year-end. I would make sure that it's a bit more than just immediately past year-end and go some time into February so there are no questions about year-end.

CHAIRMAN BERNANKE. Thank you. Governor Mishkin.

MR. MISHKIN. Thank you, Mr. Chairman. I also strongly support the short-term strategy that was laid out by the Chairman. I don't see that we really have an alternative in that context. There are a lot of issues here. The reality is that this is super complex, and we have a lot of work over the next year to be ready for the next Administration, when all these issues are going to become extremely relevant.

In general terms, regarding the long-term issues, although we got here under exigent circumstances, in a financial disruption, we might have gotten here anyway. The reality is that there was a fundamental change in the way the financial system works. When banks are not so dominant, the distinction between investment banks and commercial banks in terms of the way the financial system works is really much less. It would be nice to think that we could limit the kinds of lending facilities that we have so that we didn't have to worry about regulating or supervising other institutions, but I don't think that is realistic. The nature of the changes in the financial system means that we extended the government safety net but it probably would have been extended anyway. It was just unfortunate that it had to happen in such a crisis atmosphere. So I think we have to think very hard about the issue of limiting moral hazard in terms of a much wider range of institutions.

I am very sympathetic to the issues that President Stern raised, which is that we have to think about the kind of things that we have thought about more in terms of the banking industry: How do we actually set things up so that it is easier for firms to fail and not be systemic? There are a smaller number of firms that we actually have to supervise and regulate, and the reality is that we have to think very hard about how we're going to extend regulation and supervision to a wider range of firms. We just can't escape that. It would be nice to say that we could limit it, but we are not going to be able to limit it except to the extent that we can think about some of these issues. But it is going to be a huge issue going forward, and we really have to be ready to deal with the political process.

The way we are proceeding makes a lot of sense. It is not committing us in a way that creates a problem, but we have to be ready when this issue is dealt with. It will be one of the hottest issues that the next Administration and the next Congress will have to deal with. We have to be really on point and to have positions very carefully thought out, not just by the Board but by the entire FOMC and the entire System, so that we can have a unified position to make sure that crazy stuff doesn't happen and that sensible stuff does. Thank you.

CHAIRMAN BERNANKE. Thank you. Vice Chairman.

VICE CHAIRMAN GEITHNER. I obviously support the strategy laid out. I just want to underscore, particularly in response to Governor Warsh's comments, that this is in effect a conditional extension, in the sense that we are being careful to get ourselves more comfortable with where these four firms in particular are on capital and liquidity before we announce an extension. We are trying to get clarity on the ongoing supervisory relationship with the SEC before we announce an extension. We have already gotten the 18 major dealers in the world to commit themselves to a path to improve the capacity of the OTC derivatives infrastructure to withstand failure before announcing. We have already begun to get the resources held against default risk in the existing central counterparties higher, in satisfaction of President Stern's general admonition that we want the system better able to withstand failure. I think we are just beginning the delicate process of taking some of the air out of the vulnerable tri-party repos before the extension is announced. So, in that sense, we have left ourselves in this strategy that the Chairman laid out with a little less vulnerability to the possible impression that we would just willy-nilly extend with no effort to make the system safer. We are not going to get far enough. We are not going to know what's far enough. But I think we have a credible plan to say, "We took the initiative, even in a moment of incredible delicacy for dealing with the system, to try to get these institutions and the system in a better capacity to withstand the possibility of failure." In that sense it's a defensible and sensible strategy.

I really don't know what the right mix of boundaries is on access to liquidity in normal times and in extremis and what mix of supervisory authority conditions with what type of resolution regime is optimal. I just don't have a sense. I feel as though I know the broad tradeoffs in it, but I don't know what really looks ideal in terms of the mix of those things. You can make a pretty reasonable case for a whole bunch of variance in that mix of things. The complication for us is that we won't be able to fully control the outcome because it is going to require legislation. Part of the consequence of the system that we live with and part of the reason that we live with the system we have today is that policymakers and regulators don't fully control the outcome in terms of the incentives created in the legislation for these kinds of things. So it will be difficult for us, but all we can do is focus on the merits, think through those ahead of everybody else, and try to have the best package of suggestions that we can.

But just to come back to what we spent most of the last two days talking about, let's not lose sight of the fact that we are in the middle of this still. It likely has a long way to go. It is very hard for us to know now what we are going to decide at the end was the most critical source of vulnerability and, therefore, what to do to fix it. We don't know what the market is going to think the new equilibrium should be in terms of the return on equity across different types of financial institutions and models. Another reason to be careful as we try to contain the risks in this crisis and make the system stronger in the near term is so that we don't prejudge some of those longer-term questions. Thank you.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. I want to come back to one of Governor Warsh's comments, just probe it a little further, because I was intrigued by his notion that in some way trying to wean ourselves from this he suggested that we raise the price. It occurred to me in that same context, if we thought that had value in some sense, another way we could do the transition is to cut back either the frequency or the size of the TSLF, as we sort of wean the markets off access. Announcing both those things in advance might have some value to us moving forward. I wanted to hear other people's thoughts and reactions.

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN GEITHNER. First, I completely agree that, once we get to the point at which we believe the best policy is to dial this stuff back and transition to a world in which they don't exist, we are going to want to look at a whole bunch of things—changing terms, changing the relative attractiveness across the auction facilities, thinking about size, and thinking about price. I think that will be very important to do. It is very unlikely that the optimal path is going to be that there is a cliff—one day they are there, and the next day they aren't. So I completely agree with that.

My own judgment is—but it may not be right, and it could change over time—that for the moment we want to have a clean, crisp signal. Better to say that we are going to extend in the context of these broader initiatives to strengthen the system and not at the same moment alter their terms and relative attractiveness. But we are going to have to think very carefully over the fall, conditions permitting, and well ahead of whatever the new date is, what the desirable exit strategy is in changing incentives around use.

However, my basic sense is not now, not yet, partly because of the complexity of the signal you are sending and the difficulty of how it will be interpreted. We have done all this stuff in part because we are trying to address a complicated mix of things around incentives, stigma, and that kind of thing. It is hard for us to predict what the effect would be. Its purpose is to wean, but to do it now would make the message a bit more complicated. If the world is strong enough that you can wean them now, why are you extending? So my basic sense is, absolutely, we are going to have to figure it out by the transition, not quite yet but well ahead of February 15 or whenever it is going to be.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Yes. I support Governor Warsh's suggestion for raising the price. It is hard for me to believe that confidence in any of these institutions depends materially on 100 basis points of the price. It is the access, the funding, that they would be able to use to fund withdrawal or flight by somebody. I think it sends the right signal that we view this as exceptional. Conditions are certainly different than they were in March, when we designed and implemented it, and I think they are unlikely in the fall to be anywhere close to where they were on March 16. You might disagree, and we could always change things between now and then. But I like the signal of withdrawing the generosity just a tad.

CHAIRMAN BERNANKE. Remember that we are doing moral suasion as well. I mean, we are not really allowing investment banks to use this as a profit center. So I'm not quite sure what the marginal effect would be on incentives.

MR. LACKER. But this would also place less weight on moral suasion to discourage and would use the price system a bit.

CHAIRMAN BERNANKE. It also might increase the stigma. It is a very complicated calculation.

VICE CHAIRMAN GEITHNER. There are many things that I would love to do. I would like to make them pay for it and say that we are not going to extend it unless they pay for it. I would like to say that we are not going to extend it unless they pre-fund some liquidation facility for one of their little counterparties. There are a million things that I think would be good to do from an incentive angle—but not at the same time that we are trying to maximize the chance that we get through this and have the flexibility to let monetary policy adjust to the changing amounts of risk on the other side of the tail. So there are a million things I think it would be cool to do, and we will have to do them. We will design them really in a clever way once we are at the point where that is optimal, but I just don't think that's now. The risk is that it will undermine what we are trying to achieve with a fleeting "make us feel better" benefit.

CHAIRMAN BERNANKE. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. So just on behalf of the troublemaker caucus, [laughter] let me make a suggestion. It doesn't strike me as though the deltas between Vice Chairman Geithner's formulation and what I proffered are that large. That is, I think we collectively agree that we need, as part of an extension of the facility, to ensure that there is a suite of facilities and self-help efforts—tri-party repos, OTC derivatives, principles by you, and clarity on what the horizon looks like. I guess the only question is, At the time that you solicit the notation vote and announce this—let's say that is the second half of July—how comfortable are we at how that package looks to suggest that we are keeping options open and that the signal we are sending is not that this is a business that we want to stay in forever? Maybe in that context we will see what kind of progress we are making in truth on some of those infrastructure improvements and in the narrative, so that we can revisit—I think maybe with some guidance from Brian, Bill, and the staff—what the incremental benefits are of a modest change to the PDCF in that context. By the second half of July, we might find that we are much more informed so as to weigh the benefits and costs of it.

CHAIRMAN BERNANKE. Bill Dudley, did you have a comment?

MR. DUDLEY. The real issue may be that the PDCF borrowing may be de minimis. In that environment, it's not really clear what raising the price really means. It might even be confusing to people if you raise the price at the time the borrowing was de minimis. So I think that is just one consideration.

CHAIRMAN BERNANKE. Okay. If there are no other pressing comments, thank you very much for this discussion. I heard general support for the short-term strategy, which means, I hope, that if we do come to ask you for an extension of the TSLF we can do it by notation vote without a videoconference meeting, unless things change.

There clearly is a lot of dissatisfaction among all of us about the ad hoc nature of the way we had to deal with the crisis in March. We would all like much more clarity about our authorities, the limit of those authorities, and the match between our responsibilities and our authorities; and, as we go forward, we will try to get clarification on that. At the same time, we also want to take steps to try to increase the resilience of the system and reduce the risk that we will be in the same situation again in the future.

I will try to vet my speech. I don't want to overpromise. It has to be done over the Fourth of July weekend, so I expect everyone to be available 24/7 for commentary. [Laughter] But I will generally be talking about things that we are doing. I will talk only in general terms about some of the principles that we have discussed today about the need for clarification about how to resolve a troubled institution, how to set those limits, and so on. But I will try to circulate that, to the extent that it is feasible.

Let's see, our next meeting is Tuesday, August 5. You are invited to get lunch and come back to the table to hear Laricke Blanchard's update on congressional matters. If you have any revisions to your economic projections, you have until 5:00 p.m. tomorrow to send those in. And I want to thank—I haven't done this—Art, Scott, Pat, and all of their colleagues, who have been working very hard on these issues, for their presentation and their hard work. The meeting is adjourned.

END OF MEETING