Meeting of the Federal Open Market Committee
January 30-31, 2001

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., beginning on Tuesday, January 30, 2001, at 9:00 a.m. and continuing on Wednesday, January 31, 2001, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Ferguson
Mr. Gramlich
Mr. Hoenig
Mr. Kelley
Mr. Meyer
Ms. Minehan
Mr. Moskow
Mr. Poole

Messrs. Jordan, McTeer, Santomero, and Stern, Alternate Members of the Federal Open Market Committee

Messrs. Broaddus, Guynn, and Parry, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Ms. Fox, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Baxter, Deputy General Counsel
Ms. Johnson, Economist
Mr. Stockton, Economist

Ms. Cumming, Messrs. Fuhrer, Hakkio, Howard, Hunter, Lindsey, Rasche, Reinhart, and Slifman, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Winn, [1]Assistant to the Board, Office of Board Members, Board of Governors

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1/ Attended Tuesday's session only.

Ms. Johnson, [2] Secretary, Office of the Secretary, Board of Governors

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

Mr. Madigan, Associate Director, Division of Monetary Affairs, Board of Governors

Messrs. Oliner, Struckmeyer, and Whitesell, Assistant Directors, Divisions of Research and Statistics, Research and Statistics, and Monetary Affairs respectively, Board of Governors

Messrs. Morton, [1] Rosine, [1] and Sack, [1] Senior Economists, Divisions of International Finance, Research and Statistics, and Monetary Affairs respectively, Board of Governors

Mr. Reifschneider, [3] Section Chief, Division of Research and Statistics, Board of Governors

Ms. Garrett, [3] Economist, Division of Monetary Affairs, Board of Governors

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

Mr. Lang, Executive Vice President, Federal Reserve Bank of Philadelphia

Messrs. Beebe, Eisenbeis, Goodfriend, and Kos, Ms. Krieger, Messrs. Rosenblum and Sniderman, Senior Vice Presidents, Federal Reserve Banks of San Francisco, Atlanta, Richmond, New York, New York, Dallas, and Cleveland respectively

Mr. Weber, Vice President, Federal Reserve Bank of Minneapolis

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1/ Attended Tuesday's session only.
2/ Attended portion of meeting relating to a staff study of the Federal Reserve asset portfolio.
3/ Attended Wednesday session only.

Transcript of Federal Open Market Committee Meeting of
January 30-31, 2001

January 30, 2001 Session

CHAIRMAN GREENSPAN. Would somebody like to move the minutes for the December 19, 2000 and the January 3, 2001 meetings?

MS. MINEHAN. So move.

VICE CHAIRMAN MCDONOUGH. So move.

CHAIRMAN GREENSPAN. Without objection, they are approved.

As you may recall, at our January 3rd telephone conference we accomplished some of the routine business that ordinarily is taken up at this meeting. As a consequence we need only complete a few other matters that are typically on the agenda at our initial meeting of the year. First is the election of staff officers to serve until the election of their successors at the first meeting of the Committee after December 31, 2001, and I ask the Secretary to read the names.

MR. BERNARD. The proposed slate of officers is:

Secretary and Economist:	Donald Kohn
Deputy Secretary:	Normand Bernard
Assistant Secretaries:	Lynn Fox and Gary Gillum
General Counsel:	Virgil Mattingly
Deputy General Counsel:	Thomas Baxter
Economists:	Karen Johnson and David Stockton
Associate Economists	
from the Board:	David Howard
	David Lindsey
	Vincent Reinhart
	Lawrence Slifman

from the Banks:	Christine Cumming (proposed by President McDonough) Jeffrey Fuhrer (proposed by President Minehan) Craig Hakkio (proposed by President Hoenig) William Hunter (proposed by President Moskow) Robert Rasche (proposed by President Poole)

CHAIRMAN GREENSPAN. Would somebody like to move the slate?

SEVERAL. So move.

CHAIRMAN GREENSPAN. Without objection, so ordered. Our incumbent Manager of the System Open Market Account is a gentleman by the name of Peter Fisher, I believe! Is there any objection to appointing him to a new term? If not, I will assume that it is so ordered.

The next item on the agenda, which is the discussion of the Federal Reserve portfolio study and the future conduct of System Open Market operations, is going to have to be considered at a joint meeting of the Board of Governors and the Federal Open Market Committee. Since it has to be a closed Board meeting, I ask for a motion from one of the Board members to close the meeting.

MR. FERGUSON. I move to close the meeting.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. Without objection. Messrs. Kohn and Fisher.

MR. KOHN. Thank you, Mr. Chairman. Peter and I thought it best to begin with a discussion of the basic longer-run approaches to this question of how to reconfigure the System's assets as the Treasury debt is paid down. Then subsequently and separately we will go on to consideration of specific choices the Committee must make at this meeting concerning the management of the System's portfolio for the period immediately ahead.

As background for the first round of discussion, I will summarize what I take to be the main issues in the background papers you received, leading to the questions Peter and I posed for the Committee at the end of our cover memo. After your discussion of these issues, Peter will address short-run strategies.

As you can tell from both the physical and intellectual heft of the studies, these were major undertakings that required considerable work and imagination. Owing to space constraints we could fit only one of the team leaders from each paper at the table, but the others are sitting behind me. Peter and I want to thank the team leaders, as well as all the others from around the Federal Reserve System who were on the teams that prepared these papers, for their considerable contributions. The team leaders are available to answer your questions after my presentation and before you've had a general discussion of the longer-run issues.

I think the first important point to highlight, evident in the paper you saw last fall from the team led by Tom Simpson, is that the issue cannot be put off for much longer. Under a wide variety of assumptions about the growth of the economy and the political process, Treasury debt will be repaid over coming years. Even if the entire on-budget surplus is used in tax cuts and new spending, debt will be close to extinguished in 10 years under a fairly conservative assumption of 3-1/2 percent trend economic growth. Meanwhile, the Treasury market will become increasingly illiquid, ultimately for RP as well as outright transactions, especially considering that many of these securities are held by investors who will be loathe to give them up even at elevated price premiums.

As the debt dwindles, the System will probably want to be gradually reducing its reliance on it. This course will be necessary to insure that some of our portfolio is in other more liquid assets and to be helpful to the Treasury in managing the paydown of debt and maintaining liquid market segments as long as possible. Indeed, if there is a public good aspect to the existence of a Treasury market, the System would be performing a public service by running its portfolio down faster than the Treasury was repaying debt. Depending in part on your short-run decisions, the need to make major changes in the System's assets does not come immediately, as Peter will be discussing. But under most probable scenarios it arises soon enough to suggest the necessity of continuing the process of examining longer-run alternatives.

A second point apparent in all the papers is that there are no easy, obvious solutions to the problem of what assets to hold under this circumstance. All options seemed to have significant drawbacks. Some people have proposed continuing to rely on Treasury securities, even as the debt is paid down, by acquiring them through special arrangements with the Treasury or the Social Security Trust Fund. While the System would be able to continue to hold risk-free government assets, such plans themselves do raise a number of questions. They would transfer the problem of possibly accumulating private assets to another part of the government that may not be as well equipped to deal with it. They would leave the Federal Reserve with a portfolio of illiquid assets as the Treasury market disappears, and they would make the central bank dependent on agreements with the rest of the government for its assets.

Of course, the alternative of taking on private obligations raises other issues, including those involved with potential effects on private credit allocation and the management of risk and liquidity in the System's portfolio that were outlined in the paper on principles by Chris Cumming and Jack Beebe. The important point raised in that paper and emphasized in the note from Peter and me was the impossibility of satisfying all the System's goals at once, and hence the inevitability of making tradeoffs along a number of dimensions of portfolio management. A key tradeoff would be between minimizing the effects of System portfolio choices on relative asset prices on the one hand, and minimizing risk and maximizing liquidity on the other. A broadly diversified portfolio, which included credit to financial intermediaries holding nonmarketable assets, would have the greatest chance of exerting as little influence as possible on private credit decisions. With such a portfolio, the System would have a low profile in each market and it would not be favoring one type of asset over another. But the System would be acquiring riskier and less liquid assets, and it would be assuming the responsibility to manage those assets. As the paper on open market assets by Sandy Krieger and Brian Madigan makes clear, venturing into new markets and assets will entail a number of management challenges in addition to those involved with credit risk. These include dealing with new clearing and settlement procedures and with new counterparties. At the other end of the spectrum, if the Committee chose to concentrate operations in a small subset of markets that promised the least credit risk and the greatest liquidity--for example those for GSE securities or A1/P1 commercial paper--it would increase the odds on eventually affecting relative asset prices.

The management of liquidity itself will offer a number of choices and complexities. The System needs a portfolio that can be adjusted at the margin without affecting market prices, but not all assets in our portfolio need the same degree of liquidity. Some of the assets must be capable of being increased or decreased in size on a given day or over just a few days to meet regular daily reserve needs and the rare requirement to add or drain substantial volumes of reserves on an emergency basis. But a large portion of the portfolio need never be adjusted on short notice and can be rolled over or added to slowly without ever being run off or sold and hence can consist of very illiquid assets. And there are various degrees of required adjustability in between these two extremes--for example, to meet seasonal currency flows. Liquidity can be obtained by holding assets with active secondary markets, but some degree of liquidity will also flow from having frequent maturities of otherwise illiquid assets coupled with means of expanding or contracting holdings as needed upon maturity as, for example, in RP transactions or discount window credit auctions.

The open market asset paper and the discount window paper by Craig Hakkio and Rick Lang looked at alternative assets and techniques to help to find opportunities and tradeoffs as the System moves beyond Treasury securities. As both papers brought out, no one market or direction the System can go probably is of sufficient size or liquidity to replace Treasury securities entirely without having an important effect on relative asset prices. Both papers identified some approaches the Committee might want to explore further as elements in an overall strategy. Taken together these papers raised some issues that we listed in the form of questions at the end of the Fisher/Kohn paper, and I will repeat those questions here in somewhat expanded and modified form.

Several questions revolve around diversification. Should the System try to identify individual asset markets in which it could operate with low risk, high liquidity, and relatively muted effects on asset prices or should it move as a matter of strategy toward a fully diversified portfolio? There are individual markets that would allow you considerable scope to substitute for Treasury securities while maintaining many of the aspects of your current portfolio. Diversification on the other hand would make clear that you place high weight on not favoring one market or borrower over another. If the System moves toward diversification, should it attempt to get there soon and directly, say through the use of mutual funds, or should it adopt an incremental approach operating first in the most accessible markets with the most easily adapted techniques? As the System diversifies, to what extent should it rely on its own risk management and to what extent can it outsource risk management under the overall guidance of the Committee?

Whether you choose a fully diversified portfolio or not, another question is, what should be the relative roles of temporary operations and permanent additions to the portfolio? Outright operations will tend to have a more direct impact on asset prices and could involve the System in difficult choices about which assets or markets to operate in. Temporary operations have a number of attractive attributes. They work through intermediaries and to some extent the credit allocation decision can be left to the intermediary rather than the central bank. Risk is reduced because the central bank looks first to the intermediary for repayment, can adjust haircuts, and in the event of default can fall back on the final borrower whose paper has been used as collateral for a discount window loan or purchased in an RP. And the liquidity of temporary transactions can be tailored to System needs by having them mature frequently. But exclusive or very heavy reliance on RPs or discount window loans may also distort the financial system by favoring those intermediaries with access, by potentially affecting the liability structure of the intermediaries, and by indirectly distorting credit allocation by helping those borrowers that rely on the favored intermediary.

If you decide to utilize a large volume of temporary transactions, a further question is, what proportion should be RPs transacted in open markets and what proportion should be loans made at the discount window? RP markets outside those already used by the Federal Reserve are for the most part rudimentary, though they are likely to develop more if the Federal Reserve begins to use them. Discount window loans could be made in size, but especially heavy use would require more System resources to be devoted to collateral management. And it might raise some issues at the intersection of lending and supervision in addition to the potential for skewing credit allocation toward depositories and their customers.

So how do you view the discount window alternatives and what additional information do you require to evaluate them? More broadly, are there any particular avenues or procedures that look more promising than others and how should you proceed to explore them? Finally, the Committee might want to address the question of how to involve the public in the ongoing consideration of these issues. The minutes of this meeting along with the Chairman's upcoming testimony will cover this subject in one form or another. And the outcome of your short-run decision may very well also entail public discussion and comment. Does the Committee see other steps that should be taken to advance the public's understanding? That concludes my introductory remarks, Mr. Chairman.

As I noted earlier, the study's authors are beside me and behind me--I'm surrounded by them! We'd be happy to take questions about any of the individual studies or the overall summary.

CHAIRMAN GREENSPAN. I would also suggest that we combine comments with questions. Members should not feel inhibited in their remarks, thinking that all they should do at this point is to ask questions. That's unlikely to work in any event. President Broaddus.

MR. BROADDUS. I'd like to comment, Mr. Chairman. I want to make a pitch for trying to arrange with the Treasury a way for us to stay with investing in Treasury securities only. It will take me a few minutes to do this, but I'll try to keep my remarks as brief as I can. In my view this is a really important issue that goes to the heart of our institutional position in the government and also to our ability to conduct monetary policy effectively over the longer run.

I would begin my remarks by suggesting that we think about how fortunate we have been over the years to be able to pursue a "Treasuries only" policy--or at least approximately Treasuries only--for so long. As the Beebe/Cumming study recognizes, a Treasuries only policy alone among the alternatives that are being considered and suggested on this issue satisfies all four principles that are laid out in that paper with respect to how we should guide our portfolio selection. Such a policy would allow us to maintain instrument independence, minimize credit allocation and distortions to relative prices, maintain essential liquidity and credit quality, and provide appropriate transparency and accountability.

I would underscore the benefits of Treasuries only as follows: Monetary policy basically determines the quantity of the monetary base and as a byproduct the aggregate volume of Federal Reserve credit that we will extend. The beauty of Treasuries only, as I see it, is that it has allowed the government as a whole to implement monetary policy by essentially buying back interest-bearing government debt and replacing it with the liability of the central bank. Consequently, and this is the key point, neither the Fed nor the government as a whole for that matter has had to invest in any private assets to conduct monetary policy or to make the potentially very difficult choices among private assets that might have to be made if we consider these other alternatives.

Now, of course, we face a situation where the outstanding stock of Treasury debt may disappear. I think this presents the Fed with a huge problem because all of the alternative approaches available to us--that is, the other assets that are being considered--will involve us to one degree or another in decisions about allocating credit across particular sectors of the private economy. Some of you may recall that at the March meeting last year I argued that credit allocation would inevitably embroil us over time in politically charged decisions that could undermine our independence and the effectiveness of monetary policy. And I urge that before we go down the path of these other alternatives we at least consider the possibility of persuading the fiscal authorities to continue to issue sufficient government debt to allow us to stay with the Treasuries only approach. I believe we still ought to do that and I ask you just to consider it.

A Treasuries only option is sketched out briefly on page 16 of Chris Cumming's and Jack Beebe's study. Let me briefly summarize it. The idea is that even if continued surpluses were to permit the Treasury to stop issuing debt, the Treasury would continue to issue debt for the Fed to buy in order to replace maturing debt already on our balance sheet and to provide for secular growth in the monetary base. Note here, and I think this is an important point, that this debt would be costless to the Treasury since we would be remitting to the Treasury the interest on the debt we would buy. The question of short-term cyclical needs for increases in the monetary base would still remain, and it might be that we would need to satisfy those needs by purchasing liquid, low-risk private assets in the form, say, of RPs. But since the acquisition of private assets in that case would be self-reversing and relatively limited in size, it would involve the Fed only minimally in credit allocation. I don't think it would raise the kinds of issues and concerns that a more fundamental change would.

Now, I know that when you first hear this proposal it seems eminently dismissible. [Laughter] A lot of questions come up and a lot of objections can be raised, and Don has already cited some of those. But let me address a couple of them.

The first question is: Isn't this proposal just a way for the Fed to shift the burden of investing in private assets, if we have to do that in this new world, from itself to the Treasury? Well, this proposal would respect the integrity of the fiscal policymaking process by leaving all fiscal decisions to the fiscal authorities, Congress and the Treasury, which would protect the Fed's independence. The key point here, though, is that the government wouldn't have to accumulate assets with the revenue it would get from selling securities to the Fed. It would simply be the revenue that the government gets from the seigniorage tax--that is, from the act of creating money--and I think that's an important point. The government could use this revenue to permanently reduce other taxes or to increase expenditures. That covers one question.

A second question, closely related to the first, is whether the government as a whole shouldn't take advantage of the at least relative political independence of the Federal Reserve to let us acquire the assets and make the choices among these private assets. Presumably, we would be subject to less potential political interference than other parts of the government. This question I think is more likely to be asked by people who feel our independence is secure rather than by people like me who think it is inherently fragile. In my view the answer to this question is the same as the answer to the first question. It is not necessary for the government to acquire private assets permanently in order to conduct monetary policy. I doubt that many people around this table would think it's a good idea, just on the face of it, for the government to buy and hold private assets. If not, then I believe we should be wary of letting the Fed be the instrument for doing that. And that's one of the reasons why I think we need to adopt the Treasuries only proposal seriously.

But what about some of the alternative approaches like expanded use of the discount window discussed by Craig Hakkio and Rick Lang in their paper, or the expanded use of RPs not only for short-term liquidity purposes but to meet the secular need for increases in the base? Let me make a few comments about each of those.

With respect to discount window loans, at first blush that appears to be an attractive alternative. We have the authority without seeking new legislation to expand our use of the window in implementing monetary policy. And in principle we could increase our discount window lending from the relatively small amount that's on our books now to several hundred billion dollars. Presumably, as I think Craig's and Rick's paper recognizes, we would need to restrict our lending to banks with CAMEL ratings of

1 and 2. Also, we probably would want to limit our lending to any particular bank to a prudent fraction of that bank's capital and we would want to back our loans with good collateral. I think we could start out down this road successfully. But let's recognize that this would be a profound change in the way we do things. It would make the Fed a major, continuous creditor to hundreds of depository institutions instead of an infrequent lender to particular institutions. What worries me under this proposed regime is, what do we do if a bank to which we have extended substantial credit gets into serious trouble? In my view that would put us in a very difficult situation.

Presumably, we would want our portfolio to be public knowledge. I think transparency is essential in establishing accountability for our portfolio. It is hard for me to see that we would not be forced to make our portfolio transparent if we went in this direction. But in that situation if we pulled a loan because of the deterioration in a bank's condition, that action would signal publicly that the bank has significant difficulties. Currently we don't publicize CAMEL ratings, so this would be a fairly radical change in our supervisory approach to safety and soundness. Hypothetically, even if we didn't make the composition of our loans public, it seems inevitable that if we pulled a loan to a sizable institution, the markets would quickly detect it. My real worry is that in such a situation we would be unwilling to pull the loan. Worse, troubled banks would tend to replace lost uninsured funding with discount window loans, which is what has happened historically. It has happened in today’s world. But since our loans would be backed by much of a bank's good collateral, this would greatly increase the exposure of the FDIC--and potentially taxpayers--to losses when a bank ultimately fails.

In sum, if we greatly expand our discount window lending, we will put ourselves even more in the middle of contentious issues surrounding the potential resolution of the problems of a troubled bank. We've had that happen historically. If we go to this kind of approach, I think we will have it in spades. The kinds of difficulties we could encounter in this regime would be bad enough in the case of an individual troubled bank, but they could be quite damaging if we faced any kind of general banking crisis. I think it could threaten our independence and our ability to conduct monetary policy independently. So I believe that dealing with our portfolio problem by expanding discount window lending would be a mistake.

Let me turn now to RPs and then I will be finished. I appreciate your patience. Expanding the use of RPs would not raise some of the issues that expanding discount window lending would raise. RPs are self liquidating, which would allow us to exit problem bank situations more quietly if they arise. And we could do RPs on a wide variety of assets with appropriate haircuts. So at first blush it looks as if RPs might be the way to go. But expanded use of RPs to support the secular growth in the monetary base is distinctly different from the use of RPs to deal with the short-run problems that I mentioned earlier. To use them in a long-term way would still be problematic, I think.

First, while RPs would raise fewer obvious credit allocation issues than some of the other alternatives that are being considered, over time there is a good chance that political pressures on the System would adjust to this change. And we could find ourselves dealing with political problems in credit allocation issues with respect to RPs as well as with some of the other alternatives that are on the table here. Beyond this, though, there is one other less obvious but I think very important problem with the RP alternative--namely, that precisely because of the desirable properties of RPs that I just listed, they pay a relatively low return. Remember that in this situation the return would be the government's revenue for money creation. So if we went to RPs because of their nice properties from the Fed's standpoint, essentially we would be limiting the government's revenue from money creation. In essence, we would be using a large part of this revenue to buy liquidity services and to protect ourselves--the Fed, that is--from credit and price risk, thereby denying the rest of the government the use of these funds for whatever other purposes it wanted to use them.

This last point, in my view, is the answer to one other objection mentioned in the study to the Treasuries only proposal. The concern was that because the Treasury would be doing us a favor in some sense by allowing us to continue with the Treasuries only approach, they would demand some sort of quid pro quo. Now, if it were understood that perhaps arguably the most feasible alternative to Treasuries only, namely the RP alternative, would be costly to the government, then it would be in the narrow budgetary interest of the fiscal authorities to prefer that we stay with the Treasuries only approach. So in that instance a quid pro quo wouldn't be necessary. Having said that, I recognize that arguing this point and getting it across to others elsewhere in the government would be challenging. But in my mind it's a valid point and I think we should try to make it.

Well, that is basically my argument and I appreciate your patience. Let me list quickly the four main points I've tried to make. First, there is no need for the Fed or the government to acquire private assets, except maybe temporarily, to implement monetary policy. Second, I believe it is feasible for the Fed to follow a Treasuries only policy with the cooperation of the Treasury even if the Treasury has no other reason to issue debt. Third, it wouldn't cost the government anything to provide debt for the Fed to buy. Finally, with respect to the RP alternative, the government would forgo revenue if the Fed held a portfolio of very safe and liquid but low-yielding private RPs. So from that perspective it would be in the interest of the fiscal authorities to cooperate with the Fed in a Treasuries only approach. I know that pushing this proposal is a hard idea to get used to. But looking at the disadvantages and problems associated with the other alternatives, I find the argument for at least trying to do that compelling. And I hope we will consider doing it. Thank you.

CHAIRMAN GREENSPAN. In your scheme, what does the Treasury do with our payments to them for their debt?

MR. BROADDUS. They, of course, would be paying interest to us and we simply would be turning around and paying it back to them.

CHAIRMAN GREENSPAN. The issue basically is that they have to invest the proceeds from our purchases in something else.

MR. BROADDUS. As I see it, they first sell their securities in the market. We buy them in the market; they are not selling directly to us. So that would be the form in which they would take the funds.

CHAIRMAN GREENSPAN. It doesn't matter how it's done.

MR. BROADDUS. They take in revenue and it could be used for whatever purposes they want.

CHAIRMAN GREENSPAN. But the issue, in the context we're talking about, is that if the debt to the public is down to zero, they have to accumulate private assets.

MR. GOODFRIEND. May I answer that please?

MR. BROADDUS. Sure!

MR. GOODFRIEND. I'm sorry to interrupt; I know this is unusual. The revenue for money creation could be regarded as basically the result, on a secular basis, of the growing demand for real currency balances that the public wants to hold. If one regards the revenue for money creation, which is sometimes called seigniorage, as a tax flow just like any other tax that the government receives on a yearly basis--

CHAIRMAN GREENSPAN. Money is fungible; I understand that. It's not that I object to what President Broaddus is saying, I'm just asking a question. There are two regimes, one in which we accumulate private sector assets and one in which we don't. In the regime that you're suggesting there is double entry bookkeeping. My question is: What appears on the asset side of the U.S. government's balance sheet? Since by hypothesis we are stipulating that there is zero debt to the public, it means the Treasury can't pay off debt. Therefore, if they hold a liability, they must hold an asset. What is the asset?

MR. BROADDUS. Well, the asset in the short run is probably some private asset. But over time adjustments could be made that would take that off the books.

CHAIRMAN GREENSPAN. The only way to do that is to run a government deficit.

MR. MEYER. They can basically rebate it as a tax refund immediately or spend it.

MR. GOODFRIEND. That's right.

MR. BROADDUS. Those are the two alternatives.

MR. MEYER. The government would not accumulate private assets; the funds would just flow right through.

MR. BROADDUS. That's right.

MR. MEYER. The government never acquires debt. It just rebates it right back to the public instantaneously.

CHAIRMAN GREENSPAN. Yes, but then that alters the view that we're in surplus.

SEVERAL. Right.

MR. MEYER. That's right; there is no surplus.

CHAIRMAN GREENSPAN. One could argue that it is better from our point of view to have the credit allocation process be in the hands of the Federal government than in the hands of the Federal Reserve. But it is difficult to get around the fact that there is an allocation process going on in the consolidated monetary authority system, given the accounting process. What is it about that statement that's not true?

MR. GOODFRIEND. The main issue is that we can provide the public--

CHAIRMAN GREENSPAN. Let me stipulate something very important, which is that the government balance in terms of deficit/surplus is the same in the two regimes. The only difference is who is holding which assets. If you consolidate the Federal Reserve into the system, then there is a unique solution. The only issue occurs when you disassociate the Federal Reserve from the authorities. If you're assuming a unified budget, obviously, that does create a change in the balance sheet. I'm only saying that in this context if we don't purchase, or through RPs acquire, private instruments, somebody else has to. There's no way of getting around that.

MR. GOODFRIEND. That's certainly true given your assumptions about the rest of the government's fiscal position. President Broaddus's point is that no one in the government needs to acquire private assets to implement monetary policy.

CHAIRMAN GREENSPAN. Nobody disagrees with you on that.

MR. GOODFRIEND. Okay. Then if one of our goals is to minimize private assets acquired by the government, we could make that understood by the rest of the government, in which case they would do with the money what Governor Meyer is saying--

CHAIRMAN GREENSPAN. Meaning, lower their surpluses and refund taxes.

MR. MEYER. Think of it as a "money rain" every day!

CHAIRMAN GREENSPAN. Excuse my interjection. I thought I had a very quick question with a simple answer. I didn't mean to get into this. The Vice Chair has preemptive rights.

VICE CHAIRMAN MCDONOUGH. Thank you, Mr. Chairman. Let me make a quick comment on the issue we just discussed before I go into what I had intended to say. As long as the business cycle exists, I think there will be times when the government will and should be in surplus. And there are times when the government will and probably should be in deficit. I hope that doesn't brand me as a Keynesian, which certainly I'm not, but I think that's how the accounting works. There will be times, therefore, as your testimony last week indicated extremely well, when some entity in the government will be accumulating assets. For the Federal Reserve to say "not us," and then plan to have a particularly palsy relationship with the Treasury in order to avoid that entity being the Federal Reserve, I think is ill-advised public policy. I doubt that it would be a very good idea to encourage the invidious notion of Social Security or any other part of the U.S. government being in the business of holding private assets. There would be the temptation--and humans would surely succumb to temptation as they have since the fall of Adam--for political meddling in the private sector. I think we should avoid that in any way that we possibly can.

Let me direct myself now to some of the questions that Don raised. One involves the relative merits of a highly diversified portfolio versus a portfolio whose principal attractiveness would be a greater degree of liquidity. I think that dichotomy is based in its extreme on the notion that our holdings of market assets are of such a size that if we have a large position in a more diversified group of assets, we would really be moving the markets and, therefore, having a slight but still significant effect on the relative prices of assets. I believe the degree to which we have a relatively small portion of a diversified but liquid portfolio makes that dichotomy less than complete. So I think we need to study this more. How much can we diversify the portfolio and still keep it liquid? How do we achieve both goals? To me the size of our holdings is the key to answering that question.

As regards the balance between outright transactions and RPs, I think we've had it about right over time. When we have a permanent need to add to reserves, we do it through outright purchases. The question is, outright purchase of what? Thus far the experience we've had on the tradeoff between outright transactions and RPs indicates that the process is working very well, and therefore it should be a guide to how we would continue to operate in the future.

As for the use of the discount window for monetary policy purposes, it seems to me that we should look at the present situation and differentiate between two aspects of the Federal Reserve's responsibilities. One is our primary responsibility, which is monetary policy. Another, although not the only other, is our responsibility for the safety and soundness of the financial system--particularly the commercial banking system, given our role as bank supervisors. That's especially true since the passage of the Gramm-Leach-Bliley bill, which gives us even broader responsibility as umbrella supervisor of financial holding companies.

Let me note one of the good things about the present system, especially if we could attain Governor Gramlich's goal of moving the discount rate to a penalty rate. A penalty rate would be much more consistent with the way the discount rate should be used than it is now--where by historical accident it is below the fed funds rate. Using the discount window with a penalty rate is very consistent with the Federal Reserve's approach to banking supervision. And that approach is that we expect bankers to be good bankers. We reward them for being good bankers by allowing them to do certain things if they're well capitalized. And we punish them rather severely, including by formal actions, if they're not such good bankers. I speak with considerable experience, having been the risk manager and the financial manager of a large bank holding company, when I say that if liquidity is readily available at the discount window, it would be easy--even in a well managed bank--to succumb to the temptation to borrow. Now, the fact that there is a temptation does not mean that every bank has to be a sinner. There is temptation in the world and there are highly virtuous people, maybe even saints. But again, human nature being what it is, I think there would be a tendency for the availability of the discount window at a relatively low discount rate to interfere with sound management of banks. Banks might engage in less sound asset and liability management practices and less sound liquidity management. That's not a conclusion; it's a question. If we, the Committee and the Board together, decide to move forward and seriously consider the use of the discount window as an instrument of monetary policy to any meaningful degree, then I think we would have to expand the scope of the questions we've been asking. And one question to include would be this issue of the tradeoff between two of our responsibilities. Thank you.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. First of all, I'd like to say that these papers were really outstanding and advanced our thinking along quite some distance. I have some specific reactions to points raised in the papers and some broad reactions to the questions that Don asked. Let me start by saying that I certainly do agree with the principles outlined in the Beebe/Cumming paper. Of those, maintaining our independence is the most important principle; I agree with Al Broaddus on that. In addition, we should do all we can not to subsidize a sector of the economy or individual institutions.

But having said that and having read these papers, whatever our decision, some asset class or set of institutions will benefit from our action. We know that. It is a matter of tradeoffs, as Bill McDonough said. Since some segment of the private sector will be a beneficiary rather than the U.S. government, as is now the case, I think the decision does have serious implications for our independence. In addition, we may directly or indirectly end up affecting relative asset values and the allocation of credit across institutions and sectors of the economy.

So, given the guiding principles, how to proceed in choosing the asset composition of the System's balance sheet is the primary issue. For me there are three implications to these principles and I want to mention them quickly and then go into a little more detail. First, I think we should conduct outright purchases of U.S. government securities for as long as possible; I totally agree with that. Second, I think we should avoid outright purchases of any private sector security. I am concerned that putting on our balance sheet an asset issued by an ultimate private sector borrower would compromise our independence in that we would appear to be subsidizing a particular sector or institution. Currently the U.S. government is the most important ultimate borrower on our balance sheet. A third point is that we should deal with strong financial intermediaries rather than with ultimate private sector borrowers. Financial intermediaries put some "green space," if I can use that term, between the ultimate borrower and us. And basically I would prefer having securities on our balance sheet that are issued by financial intermediaries rather than securities issued by ultimate private sector borrowers. By using intermediaries we are one step removed from allocating credit.

These views have implications that would lead me to the following incremental strategy. First, I'd increase our self-imposed limits on our holdings of Treasury securities. I recognize that these limits were originally imposed in order to minimize the likelihood that we would affect relative asset prices. But given my strong preference that we hold Treasury securities rather than anything else, I would accept that we may affect some asset values--that's part of the tradeoff. Second, I'd consider outright purchases of GNMA mortgage-backed securities. GNMA securities are backed by the full faith and credit of the U.S. government, and I would avoid outright purchases of Fannie Maes and Freddie Macs. Third, I'd begin the process necessary to implement the ACF, the auction process for loans. With the ACF we would be dealing with strong financial intermediaries. Also the ACF is similar to an RP in that the loan rate is determined in an open market auction. Unlike an RP the asset on our balance sheet is a loan to a strong depository institution, not the actual security used in the RP. And finally, the ACF would allow financial markets time to develop the benchmark security on their own without our indirectly influencing their decision. I realize that we may in fact have problem institutions, but I don't think we would be triggering the public knowledge of that. That's all publicly disclosed now. It's part of market discipline. Most of those have written agreements. I don't think we will be triggering public disclosure of problem credit situations if we have to redirect our lending from assets involving problem credit. And fourth, I would continue to use RPs as we do currently--that is, as a means to hit our intended fed funds rate target on a daily basis. I would not use RPs to increase the size of our portfolio; I'd use the auction for that. Using RPs as a primary means to increase the size of our portfolio would permanently put private assets on our balance sheet, contrary to our principles.

So in trying to see how we would move toward a process--and not to dismiss Al Broaddus's proposal because I think it's interesting--this is the incremental approach I would follow. I believe it would allow us to achieve an orderly transition, as the government retires its debt, in a way that is most consistent with the four principles that have been set forth. Thank you for the time.

CHAIRMAN GREENSPAN. Let me just say that I think we ought to stipulate that the very existence of a central bank, in and of itself, affects markets.

VICE CHAIRMAN MCDONOUGH. Exactly.

CHAIRMAN GREENSPAN. That is, as the central bank, we are a financial intermediary. And, although we're not very large, as the Vice Chair points out, we do by the very act of intermediation change the level of interest rates, even though we probably don't change the spreads between private and public securities in any significant way. But I do think the crucial issue is the one raised by the Vice Chair--how significant is it? I say that because we're all in general agreement, at least I suspect we are, that we wish to minimize the impact we have on the private sector. I think it's crucially important to understand this, and I just want to make sure that we don't start off with the presumption that what we're doing right now is having zero effect. The mere existence of this institution has had an extraordinary impact.

MR. HOENIG. Our goal in a sense is to try to get through this transition without shocking the system as we move toward holding different types of assets. That's why I prefer this incremental approach, which takes us through a series of assets that we might hold while increasing, to the extent that is feasible, the amount of our current holdings. I think the ACF is one avenue to a long-term solution, although I recognize that the ACF raises issues that need to be dealt with. But I'd hate to move toward complete reliance on RPs or toward holding a particular type of agency security that would have a more narrow impact for the particular markets or institutions involved.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I want to start by reinforcing Tom Hoenig's comment and congratulating the authors of all of these studies. This is a subject that is almost totally neglected in the academic literature, as far as I know, and I note that there aren't very many footnote references. I think it's important that we publish these papers as soon as we possibly can because we ought to get some academic discussion going. There are a lot of good minds out there and we ought to rely on their help. We may get some further insights. Moreover, it would assist us in the discussion over the next few years of how to deal with this issue. So I would hope we could publish these papers.

Secondly, I think we all understand that the government might change its underlying fiscal policy so that this problem no longer exists. In fact, it's not that difficult to imagine a combination of spending increases, tax cuts, and a little reduction in the long-run growth estimates such that this problem might not be with us 12 months from now. That is possible. But for our discussion around the table today we ought to assume that it is going to exist. And, therefore, as much as I respect Al Broaddus' thoughts on this issue, if the underlying government surplus continues and the government debt disappears, some part of the Federal establishment is going to end up owning some assets other than Treasuries. So I think we should take that as the point of departure for the discussion.

I would also raise a point that has not been mentioned but is very worthwhile to think about. And that is that if the government, the Federal establishment as a whole, ends up as a creditor, what we do may set a pattern for what other parts of the government do. One such example is Social Security, where there is a going to be a large block of assets, at least on paper, sitting in the trust fund. So we need to consider that what we do may therefore have much greater influence than just on our own situation. We're going to be looked to as an example for how to handle this issue for the government more generally. And that makes it an even more serious issue for us, I think.

My own thinking about this to date is that insofar as possible we should rely on assets that carry the full faith and credit of governmental entities and, of course, that has been true with our focus on Treasury securities in the past. We have not talked very much about state and local securities. The fiscal affairs of the Federal and state governments are thoroughly entangled already because of the large-scale Federal grants to states and municipalities. Thus, my own preference would be that we consider very seriously adopting a principle that our primary assets must carry the full faith and credit of a government--which might be a state government. That principle would have the advantage, I think, of being relatively easy to understand and very defensible. And to my mind it's a far better principle than one that says federal versus everything else. Because if the principle is federal versus other things, we're going to get into the GSE question, which I think we ought to avoid. In my view it would be much, much better if we could accumulate assets in the form of claims on state governments rather than claims on GSEs.

CHAIRMAN GREENSPAN. There's a limit to that, unfortunately.

MR. POOLE. I know there's a limit because there is only a finite amount of such assets in that market as well. Nevertheless, it might be sufficient in size, at least for a time, for us to do what we might need to do. And it seems to me that it would be a better principle.

As I understand the current projections, assuming some fiscal adjustments this year, let's say, that don't eliminate the problem, essentially the problem accumulates to a maximum at about the time when fund flows in the Social Security system turn and the outlays exceed the incoming revenues. That's sometime in the neighborhood of 2015 to 2020 depending on the number of people taking retirement at a certain age and that sort of thing. So the interval until then is generally the period of maximum vulnerability or difficulty for us. Once the Social Security system is selling off assets, our problem will become a good bit easier, I think. And it could well be that with some fiscal adjustments we could accumulate some claims on state governments that would get us past the most difficult period. At any rate, I would focus attention there to begin with, as the first resort.

It also seems to me useful to think about our portfolio, as I believe we are, as having a relatively stable, permanent part and a trading, temporary--or whatever we want to call it--part that meets the cyclical and seasonal needs of the open market portfolio. I think the permanent part of our holdings could go into state government securities, securities that carry the full faith and credit of a government. They don't have good secondary markets, but they don't really need to for this purpose anyway. For the temporary part of the portfolio I think we'd want to be sure to use several different approaches and diversify, because we don't know exactly how this might work out. The two logical places to emphasize for some expansion in our short-term holdings would be the discount window and RPs. But going entirely one way or the other, I think, puts us at an undue risk, should the approach we select turn out to have some problems that we don't foresee or some problems that we know are there but turn out to be bigger than we now foresee. Thank you.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Thank you. Let me also begin by complimenting the staff on a very excellent set of papers. Let me note, too, that I begin with a quite open mind. My views are likely to change several times today as well as over time as we talk about this. What I want to do is to offer perhaps a still different perspective, so as to get a lot of different ideas on the table.

I have been thinking a little along the lines of what President Poole discussed, in terms of a multiple part strategy with two or three components to it. The first component involves options for providing for the secular growth of reserves and currency, what we might call the permanent part of the portfolio. The way I think about this is that I want to emphasize the diversification principle here rather than liquidity because this isn't the part of the portfolio that we would be buying and selling. These assets are going to be accumulated gradually and held.

When I begin to think about the diversification notion, it encourages me to take the broadest possible approach so that we have the smallest impact on individual markets and the least possibility of affecting credit allocation and relative interest rates. So, as opposed to starting with state and local government debt, I actually excluded that market because it is so small that we'd have to buy up the whole market to make even a dent. I took a much more radical approach. I asked myself what market we could operate in that would give us the opportunity to be the least intrusive and the most diversified, with the least credit allocation effects. The answer, of course--I'm sorry to say--is the equity markets, which are valued at about $22 trillion. So we'd have a very tiny percent stake in that market. How would we do it? I would say that we could add to that the corporate bond market and the mortgage-backed securities market and focus on a strategy that is rule-based and index-focused. It would be very difficult and very challenging. But it would give us the opportunity to have a $200 billion component, or something in that range, that is just a piece of America. [Laughter] So, I throw that out on the table.

Actually, I purposely did not include in that portfolio some of the more liquid assets because those are going to be part of my second component, which is the short-run portfolio or the liquidity portfolio. These assets would be used for carrying out the normal monetary policy stabilization efforts and for those occasions that require temporary injections or withdrawals of liquidity. We also have to be prepared for an occasional episode involving very large liquidity increases or decreases, and that's a particular challenge.

For the second portfolio, to me the natural place to expand is in repurchase agreements and I'd do that by broadening the range of acceptable collateral. The staff has suggested extending the authorization for mortgage-backed securities and considering municipal and foreign sovereign debt. That seems sensible, but that's not the direction I would have suggested. I would have thought immediately of commercial paper and high-grade corporate debt because what I want to do is to rationalize the operations in agency debt and mortgage-backed securities, and I'd do so by making sure that we also accept RPs with collateral against a broader range of private assets. And we can view those agencies as just another example of high-grade private assets.

There are some other possibilities as well besides RPs. One would be buying and selling money market mutual fund shares. We could also have a portfolio of GSE bills and commercial paper, for example, that is shorter term like our Treasury bill portfolio. It would allow us to operate--to buy and sell--in that area depending upon the liquidity and size of those markets.

A third component of my thinking was an intermediate portfolio that would be useful for meeting seasonal needs when there are swings that are somewhat predictable but can be sizable. That would provide a complement to both our permanent portfolio and our liquidity portfolio. There I found the ACF facility quite attractive, but I'm not thinking about it as $100 to $200 billion in size. That's a size where it becomes problematic or could become problematic for reasons that some have already suggested. I'm envisioning something on the order of $20 to $50 billion. It has to have an average size of about that amount so it could be run down if necessary--or built up--but never become too sizable a part of the portfolio.

I also agree that we need an incremental strategy here. We want to put off as long as possible moving into this very broadly diversified portfolio because it raises so many challenges. An infrastructure is required, which is expensive to put in place, and it subjects us to political risks as well. So the transitional steps do suggest that we should begin to think more about broadening the range of collateral for RPs. We should also begin to consider, and even experiment with, auctions of discount window credit. Moreover, we should continue to study and evaluate options and procedures, should we want to move ahead with broader diversification of the portfolio.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I actually find it very difficult to address this issue in less than about a week and a half.

CHAIRMAN GREENSPAN. Try to keep it down to a week, would you please! [Laughter]

MR. SANTOMERO. I also want to thank the people who put together the study. There's a lot of material and some of it is close to my heart. It was very well done, in my view.

Let me try to restrict my comments at this moment to two points that seem central to this whole issue. Those two points are the question of risk in the Fed's portfolio and the role of the discount window.

Notwithstanding President Broaddus' perspective, I think the Fed will have to accept the fact that assets other than Treasuries are going to be part of its portfolio. That being the case, those assets are going to carry credit risk or counterparty risk, or both. The key is for the Fed to ensure that appropriate risk monitoring and risk management systems are in place to deal with this type of risk in the SOMA portfolio. As you all know, this concept is not new. The financial sector as a whole has been building risk management systems in the last 5 to 10 years to monitor and manage its risks, and it's also not new to the Federal Reserve System itself. We already have in place a process developed by the Subcommittee on Credit, Reserves, and Risk Management (SCRRM) for the System's discount window borrowing, and I think we would need to set up something to monitor aggressively what we do in regard to credit and counterparty risk. It's rather straightforward to extend the type of risk management procedures that already exist on Wall Street and to a certain extent here at the Fed. Nevertheless, we should remember that the Fed can and should impose high quality standards on its counterparties and on the assets it places in its portfolio so that in practice, on an operational level, the risk exposure can be set at a very low level.

Holding aside for the moment the issue of whether we should operate in certain specific asset categories, the quality equivalents that seem sensible to me are the top two grades or ratings, whether we're using CAMEL or Moody's ratings. Doing outright transactions in such assets is acceptable to me in principle, but RPs do have additional security. They have two main creditors and they also allow us to be somewhat more distant from individual issues. Mortgage-backed securities have some attractiveness for the same reason: They involve the backing of more than one party and, therefore, are in some sense more secure and less subjective. RPs and mortgage-backed securities are also attractive because they don't involve direct purchases of debt of individual firms and institutions. And I think RPs are less likely to convey a sense of the Fed's imprimatur on any institution or any GSE. I think in practice that's where we are going to have to go. So we should probably just face up to that.

Turning to the second issue, the discount window, I think the notion of a non-administered credit facility is a nonstarter. By contrast, the auction credit facility may be a useful way for the Fed to provide part of the base, in the permanent portfolio people have been talking about, with an ongoing cycling of credit advances through an auction process. That would give us the base on which we can conduct standard open market operations on a daily basis. I think it might be useful to start a small ACF program as another discount window facility soon so that we can work on the mechanics of how to do it. Whether we're talking about an eventual size of $200 billion or $40 to $50 billion, I'd start off with $1 billion, get the mechanics of it working, and see how it goes.

There are number of reasons why I think this actually seems logical. First, depository institutions are in some sense competitors for direct market borrowing and for the GSEs that we will implicitly be supporting as we go into non-Treasury debt. So expanding the way we provide credit to the depository institutions as we expand the use of other debt instruments in the open market seems to me to help level the playing field. I believe it's a useful way to proceed. If RPs and/or outright holdings of different types of debt are going to be among the alternatives we have for replacing Treasuries, then perhaps we will need some way of broadening the Fed's capabilities to provide credit to the depository institutions as well. Another element that hasn't been mentioned that I find rather intriguing is that it will also help to level the playing field within the banking sector itself. Large and small banks can in fact enter the market to obtain funds, so this is going to be pro-competitive. Many in the banking community talk about the need for a funding base, and this would give smaller institutions an opportunity to participate through standard procedures at their local Fed in a manner that would in fact increase their capability to compete with the larger institutions.

At the end of the day, the ACF is nothing more than an alternative mechanism for providing funding. Because it happens not to be a security, we think about it as different, but in many respects through the ACF we're providing funding in much the same way we would with commercial paper or repos or any of the other instruments we've discussed. Thank you.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. First, I believe this is an extraordinarily important discussion for us to be having. Even if we didn't have the prospect of Treasury surpluses and the paying down of Treasury debt as the event forcing us to consider this matter, in my view it is sometimes useful to step back and think strategically about the asset side of our balance sheet. The week before last, our Bank held a two-day session, what we call a strategic planning exercise, to set goals and objectives for the next five years, as all the Reserve Banks regularly do. At about the same time I was wading through the 300-odd pages of these SOMA studies and I was struck during those two days of our planning exercise by how the focus of all the discussion was on the liability side of our balance sheet. People think very carefully about that in the Reserve Banks, and they are good at it. They think about the ACH, about analog and digital check systems, Fedwire, and on and on. We pay an enormous amount of attention to the liability side and virtually zero to the asset side of our balance sheet--probably appropriately so because very few people in the Reserve Banks actually would be able to add much to the discussion about the asset side of our balance sheet. Those individuals who can are the ones who participated in these studies, and I thought they did a tremendous amount of very valuable work. But in the end, it's only this group that can think strategically about the asset side of our balance sheet. To think strategically means you first have to have some sort of a vision and some ideas about the future beyond the immediate time horizon. Right or wrong, you have to identify possibilities, assign probabilities, and reflect on what you would be happy about or not happy about at a point out there in the future. These days the point in the future I like to encourage our people to focus on is our 100th anniversary in December of 2013. In my view it's not too early to start thinking about that centennial celebration. Governor Ferguson, once he is reconfirmed, will be the first governor whose term runs into the Federal Reserve's second century. I won't be around, but other people will be who ought to be focusing on the vision of what this institution will look like at that time.

Well, to return to the issue at hand, the Treasury's general account is one of the items on the liability side of the Reserve Bank balance sheet. It's an important element of the services we provide the Treasury as its fiscal agent. It's a big element in what Peter does as part of what I view as defensive operations, the temporary injections and withdrawals of reserves necessitated by fluctuations in the Treasury's account. It actually is not on the liability side of the monetary base, because the monetary base is a consolidation of the accounts of the twelve Federal Reserve Banks together with the Treasury's monetary account. So it comes as a negative source component on the asset side of the balance sheet. Everything else on the liability side of our balance sheet is either currency or funds of those entities that have a settlement account with us. Now, having a settlement account with us is an extraordinarily important principle to preserve both for depository institutions and for other financial intermediaries or governmental entities. This consolidation of the Reserve Banks' accounts and the Treasury's monetary accounts, outside money or high-powered money, is linked to a financial system that importantly depends on the concept of inside money--those payments mechanisms through the institutions that have settlement with us. That leads me to some principles about the options we should be willing to consider, what I would view as very low risk options relating to items we hold on the asset side.

When I started reading through all of this material, my first reaction was--and one of the Chairman's first comments brought me back to it: Let's get an exemption from double-entry bookkeeping because none of the other options looks attractive. But that would take legislation and I'm not at all in favor of legislation. I would prefer that the Fed have no authority to lend to California utility companies, whatever others might think! Debt of state and local governments gives me great pause because of that kind of concern.

If ours was a closed economy, having no international dimension, then a Treasury-only policy on the asset side of the balance sheet, if feasible, is what I think I would want. And on the liability side of our balance sheet would be either balances of our domestic depository institutions or currency that U.S. residents hold. But that's not the reality, and that's not the world we are in. So we are going to have to think about some alternatives down the road that are beyond our own borders as an institution. But linking items on the asset side of the balance sheet to ones that are on the liability side of the balance sheet is an extremely important principle, and we shouldn't stray very far from it.

Monetization is a term that applies only properly to domestic debt of the central government. The reason is that the revenue from that monetized debt, which is our liability and is noninterest-bearing debt for the government sector, goes back to the Federal government as we, in a sense, cancel interest-bearing debt. Monetization doesn't really apply, at least not in my mind in the most useful sense of that term, once we start thinking beyond U.S. Treasuries. But the other things on our balance sheet on the liability side are the accounts of financial institutions. I don't know which institutions those are going to be in the future. We broadened the scope in recent decades to those that have a settlement account with us, and that may change over time. But whoever they are, they are the only institutions to whom we should consider lending. If we have to stray beyond a Treasury-only policy, we ought to lend only to those that are creating inside money out of our outside money. And that means no GSEs--sorry, Tony, we can't go that route. But we should only lend to entities that have a settlement account with us because that is the basis of the monetary control mechanism--ultimately settling through us. That does lead me uncomfortably into the foreign arena and the consideration that our liabilities are increasingly used by others around the world. Having assets on our balance sheet that are claims on taxing authorities in other parts of the world that use our liabilities at least doesn't violate my principles on what I think we ought to be willing to consider holding as earning assets. Thank you.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I must admit that I'm still trying to digest this material and our resulting discussion. But let me just state a few of my thoughts and preferences at the moment.

To me the most promising alternatives are the discount window alternatives, particularly the ACF. A combination of practical and other considerations go into that assessment. One is, if I understand the material, that it wouldn't require legislation. Two, the infrastructure is already in place, although obviously it would have to be scaled up and may have to become more sophisticated over time. But it's not as if it would be brand new. Third, it seems to me that we would still be leaving a lot of the initiative with the private sector. Certainly with the ACF, we'd be setting the volumes with the auction but the private sector would still have the option of choosing how else they wish to fund themselves. And clearly we would not be getting involved with the ultimate borrowers. That would be up to the financial intermediaries to whom we were lending. So we would be one step removed, it seems to me, from that taint of credit allocation although, obviously, one might argue that we were favoring financial intermediaries of a particular kind at the expense of some others, depending on who has access to the ACF. Nevertheless, I see a lot of promise there in addressing many of the issues that we confront.

I would also be relatively comfortable looking carefully at expanding the collateral we would take on RPs. The final observation I would make is that as we start considering a wider range of instruments in which we might operate over time--whether RPs or assets for what we might think of as a more permanent part of the portfolio--I would be very uncomfortable getting anywhere near equities. If we were to get into that arena, that's the place I would expect political pressures to arise. If equity markets were not performing as somebody hoped, the "incentives" to lean on the Fed to do something about it could become significant in my judgment. So I would prefer, if we start to consider a wider range of instruments, that we not look that wide.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you. I've been marking down points as the discussion has gone along, and I initially put my name on the list when Al Broaddus spoke, but a number of other issues have arisen as well. First, I agree with Bill Poole that this is an important issue. It has not been thought about much, and if there is some way to put out some material--maybe not these precise papers, but some version thereof--for public discussion among academics, I believe that's a good idea.

One thing we might do today is to eliminate nonstarters. My first candidate for a nonstarter would be the suggestion brought up by my friend, Al Broaddus, and let me try to say why. [Laughter]

CHAIRMAN GREENSPAN. Are you talking about your ex-friend? [Laughter]

MR. GRAMLICH. We've disagreed before and no doubt we will again. As I understand the picture here--and I must say that I haven't really focused on some of these issues before now--we have growing currency needs. If we were to back them by growth in our holdings of Treasury obligations, that would either put the Treasury in the business of rising asset accumulation or, if we retain double-entry bookkeeping, growing give-backs. And by doing that I think we would have abolished fiscal policy, because at that point the government would not be able to accumulate or decumulate assets. And in addition to the cyclical point that Bill made earlier, I would say that fiscal policy has been a very useful policy tool. The government has done some saving in the '90s and that has been one of the sources of the capital-deepening productivity change that we often applaud. So to use this problem to abolish fiscal policy seems to me worse than shooting a cannon with a mouse, or however that expression goes. [Laughter]

VICE CHAIRMAN MCDONOUGH. You mean shooting a mouse with a cannon.

MR. GRAMLICH. Sure! It's shooting a mouse with a cannon.

CHAIRMAN GREENSPAN. I ask the Secretariat not to make that alteration! [Laughter] You got it right the first time.

MR. GRAMLICH. Meanwhile, back at the ranch! There's also a point Don raised early in his comments that I think is important, which is that we have a dwindling supply of Treasury securities and what is the social value of that? Is it better to have that dwindling supply of securities in the System portfolio or is it better to have the private sector hold them? I think it's better to have them with the private sector. So there is good reason in my view to get started on thinking about this even before we actually have to, because the supply of Treasury securities is diminishing.

Let me say a quick word on the discount facility. I've been pushing for the Lombard, as all of you know. After reading the staff documents, I think I like the ACF even better. But I also believe, and I've confirmed this with the authors of the studies, that there is no reason why the Lombard and the ACF could not coexist. We're going to have to do some thinking about how to restructure the whole discount facility, and maybe this is a good opportunity for doing that. One aspect of that, which is alluded to in the studies but is not dealt with directly, is the role of the boards of directors of all of your Reserve Banks. In my discussions about the discount window, I have discovered that views vary widely across the System regarding the role of these directors. If we were to reformulate the discount facility and have an ACF or a Lombard-type facility along with it, then the role of the boards of directors would become more clear. And the letters that the boards of the Reserve Banks write to us would relate to their views on overall monetary policy, as opposed to a particular facility for which there were 1,000 loans made in 1999. I think that would involve a huge social benefit and would be a benefit within the System as well, and I see that as a very positive development. The role of the boards of directors would become far more important, not less important.

Lastly, I would like to support Gary Stern in his feeling that our getting into the equity markets scares me a lot. I'd rather do almost anything than that. Thank you.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. It's good to have heard such diverse opinions in this discussion because I, like several other people, have read this material and re-read it and have had different thoughts at different points in time. So it's really a plus to have a wide-ranging discussion about some of these issues. I also want to compliment the authors of the papers. The studies in total comprise the most complete discussion that I've seen in my experience at the Federal Reserve of the kinds of issues that go into shaping the asset side of our balance sheet. The materials from this study have been, and will continue to be, useful in keeping me up to speed in terms of the asset side of the SOMA balance sheet and various markets in this country. And I, too, hope we can share with our own staffs some portions of this material, if not with the public, because in my view it's extremely important and valuable for them to understand these matters as well.

I start from the premise that we need to think about the short run and then the long run, as opposed to the long run before the short run, which is the way this discussion has been set up. I know there's a problem in the future and that we really need to focus on how to deal with it. But I also feel that in the shorter run, say from now to 2005, this may not be as big an issue as some of the modeling would suggest. There may in fact be ways that we can continue our operations more or less as normal through the middle of the decade. We could do that, possibly, by extending the authorization Peter has to operate in mortgage-backed securities, by extending the collateral that we take under existing legislation, and by increasing a bit our use of RPs and the GSE markets.

I raised the dreaded word GSE. Is that a word or is it an acronym? I have had my difficulties in thinking about GSEs, maybe for longer than a lot of people at this table. I worked in this area when we changed our entire book entry system in the early '80s solely because we could not deal with the number of new security issues--CUSIPs--related to mortgage-backed securities. I had people coming into my office at the New York Fed telling me how we should redesign our system totally and completely so that we could have six or seven tranches of ever more complicated securities. We had to convince the GSEs that they needed to provide information to let the public know what the real risks were in those securities. I continue to think that the use of the book entry wire is a major subsidization to the GSEs. But putting that aside, the GSEs are what they are. The Treasury, or more generally the government, created them. In a sense they're a government problem. In my view expanding our use--but not tremendously--of GSEs in RP transactions, not as outright purchases, and continuing to add GNMAs, which after all have the full faith and credit of the government, is a good short-term strategy. All other things equal, we shouldn't be so hesitant to talk about that and consider doing it.

As for the long run, a lot of people talked about outright purchases and the rollover of temporary additions to the portfolio. I think, as somebody else mentioned, that a way to view what we're acquiring is not just as temporary or permanent holdings but in terms of gradations of liquidity or illiquidity. I am attracted to the idea, for those securities we own outright, of having some layer or buffer between us and the securities themselves. I am not at all convinced that any risk management processes we've developed in the System to date--or could develop or pay people to administer--would be anything like the risk management and asset management processes that exist in the private sector. One or more of these papers mentions the possibility of outsourcing the management of a widely diversified portfolio. I would agree with Gary that equities are a little scary, but let's say the diversified portfolio is comprised of corporate debt and other kinds of instruments. I would be very hesitant to believe that we could develop the infrastructure necessary to manage a huge and varied portfolio of different kinds of securities that the System owns outright. I think that skill would be very expensive for us to develop and maintain; it exists in the private sector and that function could be outsourced. One point that nobody has mentioned is that if we're going to have widely diversified holdings of outright purchases in the long run, we might think about outsourcing the management of it to some kind of fund. I don't know what funds could do that and I don't know how they would work, but some more thought along those lines seems worthwhile.

As for moving from outright holdings to more liquid, less permanent holdings I, too, am attracted to the ACF idea--not as a be all and end all, and not in amounts of $200 to $300 billion but in smaller amounts that are auction based. And I agree with Tony Santomero in that I don't see a big difference between auctioning deposits and doing repurchase agreements on securities. I know the lawyers will jump all over that interpretation, but as a practical matter I don't see a huge difference. And at the margin, for the intermediate tranche of securities that have a bit longer term but are not permanent holdings, I think the ACF has a lot of appeal. In my view we could readily manage the risk part of it, the haircut, in contrast to my concerns about our ability to manage the risks of a widely diversified portfolio held on an outright basis.

On how large to make the repo pool, the very short-term part of the portfolio, I'm not sure that the way we've handled that historically isn't the right way to do it. I don't see any major problem with having a bigger share of temporary ownership, though the management function at the Desk would probably be a bit more intensive. But using repurchase agreements, keeping them very temporary, having big haircuts or whatever size they need to be, and having a little "green space"--to use President Hoenig's term--between us and the borrowers strikes me as the way to manage the short-run part of the portfolio. That seems appropriate for the assets we need to buy and sell in order to deal with temporary needs to inject or subtract liquidity from the market. That concludes my comments.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. As Mike Kelley often says, at this point of the go-around everything has been said. So I'll try not to repeat it all just for the sake of adding weight to the argument. Before I proceed, I also would like to commend the staff for these terrific papers.

First, I want to associate myself with those who would like to go to whatever lengths we can to avoid directly acquiring private sector assets. In my view, that's not the preferred way to go. That having been said, there are only a few asset markets, mainly mortgages and certain agency debt, that are sufficiently deep to accommodate the type of operations the Desk has to do. I would agree with Tom Hoenig's suggestion that GNMAs seem to offer a reasonably attractive alternative.

Contrary to Cathy's comments just now, I'm a little uncomfortable with expanding our involvement with agencies such as Freddie Mac and Fannie Mae. To me they raise some issues that we ought to think long and hard about. I, too, would be comfortable with continuing to use RPs and expanding their use in the way we have discussed in the past. I think the arguments about the two-party nature of those arrangements are well taken.

I also am reasonably attracted to the ACF discount window facility. It has some desirable attributes. I'm not as concerned as the authors of some of the papers about the baggage that comes with that. At least as far as monitoring the financial institutions, I think we have a fairly robust system in place for tracking and understanding the health of our financial institutions.

In connection with that, Mr. Chairman, you started this discussion by inviting questions as well as comments and I have a question about the degree to which we bump into the Home Loan Banks' lending programs with the type of lending that may be involved in the ACF facility. That may be essentially a political question. But I wasn't sure that I got from my staff a sense of just how much the ACF would put us head-to-head with the Home Loan Banks.

I'd make two other points. One is, as we've talked through the various alternatives this morning, that some significant accounting issues and questions have surfaced concerning the adequacy of the System's capital and surplus, which need to be addressed as we move to a different kind of risk profile for our assets. At some point that needs more discussion, though maybe those are implementation issues. And finally, I appreciate the point that some people made that this problem may go away or be substantially less awesome a year or two from now than it appears to be at the moment. However, we ought to be careful not to take little incremental steps along the way and end up some place that we don't want to be. We ought to have thought about the endgame, at least in terms of where we're going, as we start down this path. We should be sure that we're going to be comfortable with where we will come out. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Incidentally, on the endgame point, I think it's well worthwhile to stipulate that Treasuries are not gone forever--that this is an interim period, as President Poole mentioned. There is a critical point when we will be running very substantial unified budget deficits and Treasury issues are going to be coming back in huge volumes. We should recognize that what we're talking about is an interim period because I assume that we're all of the view that Treasuries have been an extraordinarily valuable instrument and that when they reemerge we will move back to them. So the notion here is that we're talking about a 15-year window or some timeframe of that nature. In fact, I would say it will be less than that, in the sense that we're preparing for a window that is likely to close on us sometime in 2006 or 2007 under existing forecasts and reopen about 10 years later. So it's not a permanent structural issue, and we ought to remember that when we're contemplating the various tools we might use. It is a decade-long phenomenon, not something that is chiseled in stone. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. First, let me add my congratulations to the people who wrote the papers. I thought it was a fine job.

Mr. Chairman, I think this last point you made is very important. We should keep this in perspective as we make our comments and as we plan what we're going to do. I don't have firm views on many of the issues that have been raised, but I do on some. I'd like to mention both the ones I don't feel strongly about and the ones I do.

Your comment leads me to feel that we should be emphasizing a diversified approach in what we do going forward, and I think of diversification in two ways. One is in terms of the percentage of our portfolio and the other relates to our influence in the market for any individual security. That's another aspect of diversification. It's similar, I think, to the liquidity issue we've talked about here. The papers were written from the standpoint that as we enter a market, we reduce the liquidity of that type of security in the market. Actually, I believe it cuts the other way as well. If we enter a market for a specific security, it would encourage others to issue more of those securities because the central bank is in that market. So I think the liquidity may increase as well, as long as the supply is elastic.

Clearly, I would prefer the use of government securities only, as we all would. When we start going beyond that, I think GNMAs are a good first step. But personally I would not want to go forward in Fannie Mae and Freddie Mac issues for the reasons that have been discussed in the press, relating to giving those agencies preferential treatment in the marketplace.

Of the areas that I'm encouraged about for diversification, one is the broader use of RPs. We are all familiar with them and I think we know their advantages, so I won't list the latter. Second, I believe we should look at the discount window option very carefully. It does have promise. I believe President McDonough is correct in saying that we should consider it in a broader perspective, tied in with our supervision and regulation activities as well. In my view the governance issues are manageable there. And I tend to be drawn toward the ACF approach; that clearly seems worth examining much more carefully. Another area is the foreign securities that Jerry Jordan mentioned. I view that as a promising area. They are used by other central banks in their open market operations. We're not talking about foreign exchange operations, so I think that arena has promise and is something we should look at more carefully.

On private securities, personally I would draw a line in the sand on those. I would not want the System to be investing in private equities. My concern about this goes back 25 years when I was in the Labor Department and was co-chairing with the Treasury Department something called the Pension Benefit Guarantee Corporation (PBGC), which insured pensions and the assets coming into the government. The question when it was being set up was what to do with these investments. Of course, the staff of the PBGC wanted to invest in private securities to get a higher return for the insurance fund and, being young and naïve, I thought that sounded like a very good idea. As we got into discussions of this with the Treasury I soon realized that the problems would be insurmountable. That would inevitably lead to government influence in the marketplace, and the political pressures would be so enormous that mischief would be inevitable. So I would draw a line in the sand that would keep the Federal government, both the Treasury Department and the Federal Reserve, out of that business.

I do want to make a comment about transparency in this process. And I think this is important. Bill Poole said it would be good to get academic input into this. To me the issue is more than just getting these papers out in the public domain. I think we should be very open and transparent about what we're studying as a central bank. Don and Peter mentioned that they wanted to consult with selected members of the Congress, their staff, and people in the markets. Once we start doing that a lot of rumors are going to circulate. Those rumors could affect the markets for the categories of securities that will be discussed, and that would be very unfortunate. So there is a practical reason for opening up this discussion and I don’t see any reason not to be transparent about what we’re doing. We are breaking new ground here and we could get a lot of helpful input from academics and others who are knowledgeable about these areas. And even though we’re talking about a period of ten years, we do have some time before we need to make decisions. In my view it would be very desirable to get input from others and I think it would help our credibility as well.

In terms of next steps, I would contemplate asking the people who’ve worked on these papers to come back with some concrete proposals in the areas we would want to study in more depth. I’d also want to discuss how we should make the public aware of what we’re doing and be open to input from people from outside the System as well.

CHAIRMAN GREENSPAN. Thank you. President Parry.

MR. PARRY. Thank you, Mr. Chairman. Many of the points that Michael Moskow made are similar to those I’d like to make. I’d start by saying that the material certainly provides a lot for us to digest and I would assume that we’re just beginning the dialogue on a lot of these issues. Also, I feel as though we probably would benefit by having others besides those in this room examine some of these issues. So the proposal made by Bill Poole and variants of it are intriguing.

Let me make a couple of points. These are not unique, but they do reflect where I am at the present time on this issue. First of all, for the near term I certainly think that reliance on Treasuries to the greatest extent possible is desirable. That leads me to suggest that we ought to have a discussion of our self-imposed limits on holding Treasuries or at least assure ourselves that the limits we have in effect at the present time are the ones that we want to retain going forward.

I also am intrigued by the idea of considering outright purchases of GNMAs, although they certainly involve some technical complications associated with mortgage repayments and so forth that would have to be addressed. I'm not in favor of expanding our use of other GSE obligations. With regard to our RPs, I think there is room for expanding the collateral we accept. I would say, though--and this is very different from President Moskow's view--that I'm a little concerned and would like to hear more about using foreign collateral. That would expose us to sovereign risk and would, I assume, put us in the delicate position of having to choose which countries to sanction, so to speak. And I'm not sure I understand how that process would be accomplished.

Finally, I find the ACF proposal intriguing. I'm not sure to what extent the ACF could be used productively, but it's something that we ought to look at a little more closely because there probably is a role that it could play. Thank you.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. I've learned an enormous amount from the papers, and I appreciate that. I also want to say that I've learned an enormous amount from the comments that have been made around the table here today by so many different people.

I have to confess that I'm still having trouble getting over an acute state of denial. [Laughter] To me the way we have been operating, through the exclusive use of

Treasuries, is just so overwhelmingly the best way to do it that I find myself having a terrible time being attracted to any of the various alternatives on the table.

One thing that we haven't pursued in talking about the alternatives is the concept you introduced, Mr. Chairman, about this being an interim problem. That raises quickly the question of how big a problem we might face and for how long. I'm not sure we have thought about this in that context, or at least I haven't. I was viewing these alternatives as basically involving an approach that would be carried forward more or less indefinitely into the future. But because I feel so strongly about trying to stay with what we have been doing, if at all possible, I believe we ought to give Al Broaddus' idea a serious look. There may be fundamental flaws in it; I certainly haven't thought it through so I don't know. But if it would help us to get through an interim problem, then we ought to try to see if it is an approach that should be pursued.

I also strongly suspect, even given the presumed sanctity of the Social Security Trust Fund and the way its assets will increase and then decrease, that the political institutions down the street are sufficiently inventive that they may very well find ways to make this problem go away. So it may not become an issue that we need to worry about at all. Nevertheless, we should look at the problem and alternative solutions. We must do that, and it is right for us to do that.

I don't have a set of solutions to propose. I have not tried to come up with that. The ones that have been made around the table are all very good and all have strong points. I would like to make one negative point--it has been made before--but I feel quite strongly about it. And that is that when we do new things, if at all possible we should try very hard to avoid putting in place operations that are going to have an impact on the markets. Investing in equities would be the worst. But almost anything we do is liable to have an impact on the market, and we must give very, very close attention to trying to avoid that or at least minimize it. I say that because once this institution puts its imprimatur on any one of these markets and begins to put money into it, I believe the impact we will have on that market will go well beyond the amount of dollars that we may be investing in it. If we do enter markets and begin to distort their performance, I think it's a very, very short step from there to distorting the optimal investment flows across the economy. And if that starts, it's a very short step from there to distorting the social distribution of assets that are appropriated across our economy and across our society. My concern, if it's fair to talk in terms as broad and grandiose as that, is that this begins to take us well beyond our role and even beyond the scope of the problem we're trying to solve here. So I would be extremely careful about what we do because its impact will ripple across the economy, well beyond the direct ways that we can accurately identify and that these studies indeed have already accurately identified.

CHAIRMAN GREENSPAN. Thank you. Any further comment on this round?

MS. MINEHAN. I wanted to make an additional comment because I found very interesting the point that you, Governor Kelley and Bill Poole raised about an interim period of 8 to 10 years, or however long it might be. I'm thinking of that in combination with the greater potential now than, say, this time last year, that some Social Security funds will be invested in private assets. It may not happen this year or next year, but that could well be given serious consideration by this Administration and the Congress. The Social Security Trust Fund holds only nonmarketable securities. Is there a way in which those nonmarketable securities could be acquired by us as part of our permanent portfolio and the cash then used by Social Security to do some investing under whatever guidelines are set up in the legislation that changes how Social Security works?

CHAIRMAN GREENSPAN. I think it's best in this context to think of the Social Security Trust Fund as nonexistent. It's an intra-governmental transfer.

MS. MINEHAN. Yes, I realize that.

CHAIRMAN GREENPAN. That's the best way to look at it in terms of Al Broaddus' suggestion. Let's take just two examples of RPs on the asset side: RPs limited to private RP securities or RPs involving only government securities. What we'd really be doing, if we leave fiscal policy alone, is shifting the assets from one government sector to the other. In other words, we would be swapping our RPs with the Social Security Administration or the U.S. Treasury--it doesn't matter which one--and in doing that effectively we would end up with U.S. Treasuries on the asset side of our balance sheet and they would end up with the private securities.

MS. MINEHAN. Right.

CHAIRMAN GREENSPAN. In my view it's useful to think of these alternatives not in a flow sense but in a balance sheet sense and the swapping of assets. Most of what we have discussed around the table today is best judged in that manner. I think the strong point in Al Broaddus' argument is that it's better for the Treasury Department than for us to be making the political judgments. It would probably be better if neither of us were to make them, but that is the sort of thing that I think we have to worry about.

MR. GRAMLICH. Could I pose another question on this point? I don't recall the numbers but, even though this is an interim problem, it's my impression that it is a huge interim problem.

CHAIRMAN GREENSPAN. It is.

MR. GRAMLICH. That is, the asset accumulation would be something on the order of $2 trillion as I remember the numbers. Isn't that right?

CHAIRMAN GREENSPAN. It will depend, obviously, on how quickly and to what extent the surplus is frittered away. And there are physical limits to spending it or refunding it in taxes if only because we're going to get congressional gridlock that will prevent that. But at the moment, if we take our structural productivity numbers even remotely seriously, it is very difficult to get around the fact that not only will we see growth in the surplus, but substantial growth. It's the on-budget surplus that really takes off.

MR. GRAMLICH. Right. And aren't we talking about assets rising, even under moderate assumptions, to something like $2 trillion?

CHAIRMAN GREENSPAN. If we think in terms of the problem starting in 2007, the government is going to start to accumulate assets then even though there is still some debt on the books. If we talk about a unified budget surplus in current services of about $500 to $600 billion annually, then depending on how many years beyond that we want to think about, it could build up to an incredible number. Now, that's not going to happen.

MR. GRAMLICH. No.

CHAIRMAN GREENSPAN. That will be taken off the table. But you're quite right that the potential amount is quite substantial.

MR.GRAMLICH. So, it's not like one of these interim problems that we deal with from May to July, is it? [Laughter] This is a very significant problem. While we ought to recognize that it may be over some day, we need to treat it as a real concern that we have to worry about for the long run.

CHAIRMAN GREENSPAN. Yes. And Jerry Jordan's view that just going through this exercise is of extraordinary value in and of itself is not beside the point either. We may never implement any of these options, but I bet we will find that this discussion and the work involved in it has been quite valuable to our understanding of the way the system functions and how it should best be managed. Al.

MR. BROADDUS. Mr. Chairman, I have a couple of quick comments. First, Mike Kelley summarized my main concern about this a lot more eloquently than I did, and I want to associate myself with his remarks. Second, one other point occurred to me during the discussion. While this may be an interim problem--and we don't know the magnitude of it--you indicated that once it's over, the presumption is that we would go back to investing only in Treasuries. I would just caution that if we go down these other roads over a period of seven or eight or nine years, it may not be that easy to extricate ourselves.

CHAIRMAN GREENSPAN. That's a very good point and one we should think about.

MR. BROADDUS. That goes to the issue of the endgame. In my view the endgame needs to be a position where we somehow maintain our independence. That's really what this is all about to me. As for the argument that we need to share the burden with the rest of the government, I think there’s a lot of public support for the Fed to be as insulated from the political process as we can be in order to conduct monetary policy of a high quality. So as a practical matter, I’m not sure that that argument would necessarily be very difficult to deal with.

MR. MEYER. Just one point: Our strategy needs to take into account the strategy of the Federal government because the government itself is going to be developing an asset allocation strategy as part of this process.

CHAIRMAN GREENSPAN. I think that’s a very important point. We can not be making our judgments independently of what the Congress and the Administration are doing. President Poole.

MR. POOLE. I have one comment and one request. My comment is that if we have a portfolio of private securities, there may be aspects of managing the credit risks that would differ for us relative to a private portfolio. When we’ve looked at the issue of managing those risks, it has been discussed primarily as if we were a large mutual fund investing in bonds or something like that. Some elements of our operation may differ from those of a privately managed portfolio. For example, we might want to stay with a buy and hold strategy. Once we decide to buy a security we might not want to sell it, whereas a private portfolio manager might want to sell it. I don’t know precisely what the risk-management differences might be but I’m thinking about issues like that.

CHAIRMAN GREENSPAN. I thought you were raising the issue of whether we would foreclose on home mortgages! [Laughter]

MR. POOLE. We may not have a choice if there is a default. In any event, there may be some differences. What would we do if we ended up in bankruptcy court as a claimant? That's a more realistic example, if we have debentures in the portfolio other than home mortgages.

Secondly, my request. Can we at least downgrade the security classification of these studies to Class III so that the staffs at all the Reserve Banks could look at these materials? That's a request for the powers-that-be to consider.

CHAIRMAN GREENSPAN. Well, why don't we turn that question over to the power-that-be! [Laughter]

MR. KOHN. Who would that be?

CHAIRMAN GREENSPAN. Coffee is available. I think we've had a quite extraordinary discussion so far. Peter Fisher will have the floor when we return.

[Coffee break]

CHAIRMAN GREENSPAN. Let me make a correction or clarification of my earlier statement regarding my general estimate of when the unified budget surplus will go to zero and then turn negative. I said the period of surplus is likely to be 10 years or more. Let me just tell you what we know because I forgot to raise an issue related to this.

If we look at the CBO data themselves and use the midpoint of those projections, the budget is in surplus out to 2030. The likelihood that that will actually occur is, frankly, quite small. So I've tempered my view as to how long we will be engaged in the accumulation of private assets. A 25-year period, say, from 2005--which is the pro forma estimate, so to speak--seems to me a gross exaggeration because the unwillingness, politically, to allow that to occur strikes me as overwhelming.

Nevertheless, the notion that the period is going to be, say, 10 years is more a political judgment than an economic one. It is conceivable that the period may actually be longer than that. And the point that Governor Gramlich made is important, namely that the size of the problem, and not only how long it will last, is also a concern. That the size is large enough to warrant our attention is critical. Having gone through all of this work to study the problem and continuing to do so does not in any way lead to a presumption that if the situation only lasts 10 years we can get through it easily. In other words, it is possible that a severe problem may never emerge but it's quite conceivable that it will, especially if we look at these CBO numbers. Remember that the CBO numbers are not radical. There's a good case to be made that they are too low. So we have a very wide range of possibilities here. For the purpose of managing the Federal Reserve portfolio, we have to make the presumption that the problem could be much larger, though I tend to agree with Governor Kelley that it's likely to be smaller rather than larger. But we can't behave that way until we see that materialize. Peter Fisher.

> MR. FISHER. Thank you, Mr. Chairman. Effectively, I'll just be recapping the discussion and recommendations on possible near-term approaches presented on pages 3 through 5 of the memo that Don and I sent to the Committee. I have some prepared remarks and I'm going to try to respond to a few of the issues members raised that relate to this topic.
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> I'm going to be discussing what I think of as the immediate challenge of operating over the next year or two, a different kind of interim than the Chairman was talking about. In my personal view, that's the time horizon--two or even three years--before we could implement any of the longer-term alternatives that are likely to be pursued, whether they involve legislation or even the ACF. On the ACF issue, let me just digress a moment. The idea of starting small is, of course, a prudent way to begin. An open auction would be a challenge because the big banks are not likely to be among the bidders. The bidders will probably be the small banks in the country who don't have access to funding markets. So to make the

auction work at all, we really have to contemplate an electronic auction process connecting thousands of banks. And that means a nontrivial IT project, it seems to me. So in the next couple of years we face an immediate challenge.

There are really two constraints here. One involves our self-imposed limits on our holdings of Treasury securities and the declining supply of Treasuries. The other is the self-imposed constraint of trying to keep our RP book small. I'd like to talk first about the limits on our Treasury acquisitions that we set last July. Under those limits we still have a net authority to purchase $60 billion, so these limits are not going to be binding tomorrow. On the forecast we're working with, that carries us for another two or three years, roughly speaking, given the relatively modest growth in currency we expect to occur. But at present we're dancing as fast as we can to try to redistribute our holdings more smoothly across the entire yield curve to prevent our pace of accumulation of Treasuries from disrupting the markets. A couple of sensible people in the market have reminded me that we--the Federal Reserve System and its operations--are flying right under the radar. The Treasury is taking all the criticism for its buybacks and its reduction of supply that is shrinking the liquidity of the market. But we are there also draining the supply, and just because we do it cleverly doesn't mean that a lot of people in the bond market don't know it's our operations that over time are working progressively to reduce the liquidity of the market. When we think about the alternative of raising the limits on our acquisitions of individual Treasury securities, which is of course at the Committee's discretion, that's really a question of how quickly the Committee wants to be a party to eroding the liquidity of the market in which we operate. That's not a free good. Yes, buying more Treasuries solves our asset accumulation problem for now, but the very act of doing so diminishes the liquidity of the market on which we rely.

In effect, recently we have been setting the pace of outright purchases of Treasuries at a rate that we think will not disrupt the market. We adjust it gradually in an effort to keep out of the way of the Treasury's buyback operation--it's sort of an intramural courtesy--and we alter the size of our 28-day repo book to meet our reserve needs. As I said earlier, the RP book functions as the residual in that respect. Before the buildup associated with reserve needs at year-end, we had about $10 billion of 28-day RPs outstanding. I'll be discussing that in more detail later in my market report. At year-end 1999 we had roughly $140 billion in RPs outstanding against a mix of Treasury and agency debt and mortgage-backed collateral to match the substantial buildup in currency in circulation as a result of Y2K.

Let me remind you that we have been taking Freddie Mac and Fannie Mae straight debt as a part of our repo operations for years. What we added that was novel for Y2K was mortgage-backed securities guaranteed by Freddie Mac and Fannie Mae as well as by Ginnie Mae. The fact that we began taking mortgage-backed securities appears to have reduced the financing rates in that market by a basis point or so, something in that neighborhood. No one I've talked to in the dealer community, though, thinks that the growth of our RP book to $140 billion, with mortgage-backed securities as a component, actually affected financing rates at all. That is a very big market. The fact that we entered that market gave a certain something to it, but the size of our presence in that very large market didn't really play a role--neither our moving into the market at the end of 1999 nor rolling out of it in 2000.

Let's suppose we allowed the repo book to grow a bit and combined that approach with measured purchases of Treasuries under our limit structure--perhaps periodically revisiting the limits themselves, but for the moment taking them as given. Under that scenario, we in all likelihood would be able to meet our reserve needs for the next three or four years, or maybe even longer, depending on the rapidity of Treasury paydowns.

Don and I certainly understand how some members feel about our accepting Freddie and Fannie mortgage-backed securities as well as straight debt. And that is the genesis of our effort to put a self-imposed constraint on the RP book. Under likely scenarios of near-term Treasury paydowns, notwithstanding political events, moving to a Treasury only RP book would be a rather abrupt act on our part. It would be confusing and possibly disruptive to the market. And in my personal opinion just doing that could risk making an overtly political issue of our asset selection.

Given the Committee members' discomfort with the status quo, Don and I recommend that the Committee signal its intention to move in the direction of diversifying the book of RP collateral. A first step would be to instruct the staff to explore the feasibility of adding tax exempt state and municipal securities and foreign sovereign securities to the pool of collateral accepted for RPs. This would involve discussions with Congressional staff and market participants, as Mike Moskow noted. But as Don said in his opening remarks, it is fully our intent that this subject would be raised in the Chairman's upcoming testimony--and certainly in the minutes of this meeting, to be released in March--before we would talk to anyone directly.

Moving in the direction of diversification would tend to dilute the special status that Freddie and Fannie obligations are now perceived to have. As for RPs against foreign sovereign securities, let me repeat that we envision doing dollar RPs against them; we would put out dollars and take in foreign sovereign securities. Again, those are very big markets. There's a table in the Madigan-Krieger paper that shows the size of various markets. We need to think about trying to find ponds in which we will be a small fish, which is not easy. And that is the huge attraction of the foreign sovereign markets.

Given the uncertainty in the fiscal outlook, I thought it would be helpful to find a way to muddle through for the next few years without departing significantly from our current mode of operations. As I noted earlier, continuing to purchase Treasury securities at a measured pace and allowing the book of term RPs to grow to fill the gap could meet reserve needs for the foreseeable future. Therefore, Don and I are asking the Committee to extend the Desk's temporary authority to operate in mortgage-backed securities. More specifically, we ask that the Committee extend for one year the temporary suspension of paragraphs 3 through 6 of the Guidelines for the Conduct of System Operations in Agency Issues. We also request the Committee's authority to explore the feasibility of adding tax exempt and foreign sovereign securities to the pool of acceptable RP collateral. So that's our proposal. What we'd like to do now is to have an open discussion of these matters.

On the agenda you'll see that we are asking for a vote of the Committee on three proposals. One is the very technical issue of changing the dates in the Authorization for Domestic Open Market Operations. The second is the vote on the Guidelines for operations in agency issues. And the third is the vote to renew three foreign currency documents--the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations--without amendment. Before we proceed with those votes, however, the Committee may wish to discuss these proposals or ask questions of Don and me or other staff.

MR. PARRY. Question: How will you determine which foreign securities will be accepted as RP collateral? What is going to be the criterion for that?

MR. FISHER. Let me make a couple of points. First, that's something we would explore in our feasibility study, and that's why we're not really asking you to authorize it yet. Second, I would remind the Committee that last fall we offered--and you agreed and the Treasury has agreed--to change our investment pattern in foreign currency reserves, particularly in the euro area. We had been in German instruments only and we knew that was not sustainable. So we've come up with a mix of credit criteria that would allow us to have a repo book against most euro-area sovereign nations. And we have developed even tougher credit criteria for outright purchases, which under present conditions would make only the securities of Germany and France eligible for the outright portfolio. We are currently discussing with the Treasury our view that it's time to put out the announcement about that so we can begin conversations with market participants and be transparent about it before we actually make those investments. So I think we have a fairly disciplined set of credit criteria for investing in a foreign portfolio for a time. I admit that it would not be for all time but I think we could follow that model. Eventually I'm sure we will be caught in a difficult line-drawing exercise, which is no doubt what your question is driving at, and I don't deny that.

MR. PARRY. Similarly, what about the criteria for municipals?

MR. FISHER. The category of municipals that we are able to purchase under statute is rather narrow, as the papers have made clear. It involves issues of very short maturity. I think we could also choose to set credit criteria or perhaps limit ourselves to state sovereigns, so we would not be opening ourselves up to the whole market. But to come up with some objective criteria I think we'd have to go through an exercise similar to the one we have done with respect to the foreign RP book.

MR. PARRY. Would you look at the liquidity of individual state markets?

MR. FISHER. In this case we're talking about RPs, so we know the underlying instruments themselves may be illiquid. The question is whether we can get the clearing banks and the dealers to make them part of the pool of collateral that goes into the assets they pledge in an RP with us. What is modestly promising about both foreign sovereign and municipal securities is that the clearing banks are set up to do them, though only a tiny amount is being done now. Nevertheless, that's a big hurdle in terms of technology. We probably wouldn't have a liquidity criterion for the assets but we might want to place limits on the amount of any one state's securities we take for fear that if we had to liquidate, we would have to worry about how much we were trying to sell.

MR. PARRY. Relative to its size?

MR. FISHER. Relative to its size. But we wouldn't take much comfort from thinking that some segments of that market are liquid. None of those securities is liquid.

MR. MCTEER. Would the lights have to work in that state? [Laughter]

MR. FISHER. I guess that depends on whether you're from Texas or California!

CHAIRMAN GREENSPAN. Historically, how much have we seen in failed RPs? Have we ever run into a failed RP ourselves where the counterparty defaulted?

MR. FISHER. I don't believe so. I'm sure that at the time of Drexel it crossed our collective minds and we worried about it. But I don't recall a failed RP in my time.

VICE CHAIRMAN MCDONOUGH. Sandy was here at the time of Drexel.

MS. KRIEGER. I don't think we've ever had a failed repo.

CHAIRMAN GREENSPAN. Has anybody had a failure?

MR. KOHN. Back in the '70s and '80s there were problems in the RP market--such as people pledging the same securities several times--but none involved the Federal Reserve. A few laws were changed and people went to jail.

CHAIRMAN GREENSPAN. That's serious, but it has nothing to do with the RP market. That's more the felonious market.

MR. KOHN. Right.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Peter, a question: Part of the rationale for bringing in the municipal and the foreign sovereign securities was that the authority to operate in those instruments was available under existing law. That would give us the added flexibility to make it through a reasonable period as we entertain more challenging options. But you also noted that in part this strategy was a way of diluting the special status of Fannie Mae and Freddie Mac securities. It seems to me that it does just the opposite. What it says is that we operate only in collateral that is government sponsored.

MR. FISHER. I don't agree that it does just the opposite. To make a correction, I believe the deposit accounts we hold for the GSEs are authorized by statute. So that's not a very useful break point. I know there are all kinds of legal issues surrounding the GSEs that we don't really want to get into. But signaling to the markets that what this Committee wants to do is to diversify its asset mix certainly moves people's thinking away from the notion that agency issues, those of Fannie and Freddie in particular, are going to be the assets of choice. And that's an issue on the minds and even the lips of some people in the market. They are questioning whether agency issues are going to be our assets of choice as Treasury issues decline. I think the foreign sovereign markets are big enough and deep enough to dissipate the perception that we are somehow going to become dependent on Freddie Mac and Fannie Mae securities.

MR. MEYER. I will simply reiterate that it seems to me to reinforce the status of those entities as a government related--

MR. FISHER. Governor Meyer, I want to be clear. I certainly share the views you expressed in your earlier remarks about the preferability of a clean sheet of paper as well as the longer-term hypothesis that President Poole offered that if we are in Freddie and Fannie obligations, why not commercial paper and corporate bonds. I'm looking at what to do without a change in statute. So I share some of the views you expressed.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Peter and Don, I understand why you want to diversify into the foreign sovereigns and why you dislike Fannie Mae becoming the benchmark and so forth, but let me ask you to speculate a bit further. The market would be informed as to why we were doing this and I wonder if there would be a political backlash in the sense of our favoring foreign sovereign over domestic securities. That whole issue could come back and bite us in a sense, as we try to move into that market. Is there a risk or even a likelihood that we might have to deal with that type of criticism?

MR. FISHER. Don and I both may want to comment on that. I certainly would agree with you that it's a risk. I think that our eyes would be closed if we didn't see that as a risk. We are in a rather awkward position. If we are too stern in the view that we should only be monetizing our own government's debt, I think that poses questions about our consistency, given the eagerness with which we've encouraged foreign sovereigns to monetize U.S. Treasuries. There are $500 billion worth of them in custody at the New York Fed. Other central banks seem to consider it reasonable to hold our Treasuries in a permanent way as assets on their balance sheets. In many countries in the world it is not viewed as a sign of central banking virtue to become a captive financing agency for one's own Treasury. The Bundesbank has felt very strongly about that since the Second World War; they have tried to avoid taking on that role. So in a broad world view I think there are a number of points that could be brought to the table to explain why this is a reasonable thing to do and why reasonable central bankers might do it. Other central banks do it now, as our study's background papers indicated. But I don't want to ignore the risk that there would be some questions. I think keeping this activity in the RP area and not purchasing foreign securities outright is clearly an element in trying to address that concern. But I certainly wouldn't deny that that's an issue.

VICE CHAIRMAN MCDONOUGH. And it certainly explains why we want to study state and municipals at the same time.

MR. HOENIG. Yes.

MR. KOHN. That was one reason why we suggested that this simply be explored, to test a bit and see what the reaction might be and whether we could explain it in a way that would be fully understood.

CHAIRMAN GREENSPAN. We certainly wouldn't go forward if we ran into significant negative responses. But it depends on how it's explained.

MR. HOENIG. It does point out how carefully it has to be explained not only to our most severe critics but also to those who immediately grasp it and understand it.

CHAIRMAN GREENSPAN. Indeed. It's an issue we're getting into with full awareness of the implications of the central bank treading in areas where we have not been before. President Jordan.

MR. JORDAN. Peter, I'm probably going to need to ask a follow-up question to my first question because I think I can guess the answer to the first one. Suppose the Committee accepted part or all of your "B" proposal of pouring RP dollars into foreign debt, with or without municipals, but did not accept the first part of the proposal to reauthorize the temporary authority to accept mortgage-backed securities. What would be the problems associated with that?

MR. FISHER. We would stop taking mortgage-backed securities, including those guaranteed by Ginnie Mae, and we would then be including in our repo book Freddie and Fannie straight debt. There is an aspect of that which may look as if we're giving an even greater preference to Freddie and Fannie debt than we are to issues backed by the full faith and credit of the United States. That is the awkward part of how we were operating before the fall of 1999. I regret that we were in that position; it's something we should have understood better. It was a slightly awkward place to be and that would be the consequence of the scenario you outlined.

MR. JORDAN. Now consider the possibility that you will find the notion of operating in foreign sovereign RPs politically acceptable. Suppose it's a good enough market to be able to do substantial amounts and it is working to meet all of your needs and the Committee's intent down the road is not only to seek authority to operate in mortgage-backed securities but in GSEs as well. How difficult does that become?

MR. FISHER. That's a difficult political issue on which I would prefer that others--perhaps those who live in this District--comment. As a market matter, I don't view it as a major challenge, given a reasonable time period to work it all out.

MR. JORDAN. Okay. Well, from a Committee process standpoint, often on issues like this we have found that once we start doing something, the burden of proof on those who think it is not a good idea and want to stop doing it is quite formidable. It sometimes serves our purpose, if we can get a consensus on our objectives down the road, to reverse that burden and say we will stop unless somebody proves that we should continue because the benefits outweigh the costs.

MR. FISHER. Let me see if I read you clearly. I don't want to put words in your mouth, but I want to be sure I understand. You're envisioning going forward with foreign sovereign and municipal securities as a part of the RP book--putting aside the issue of volume--and setting a forward date for getting out of Fannie and Freddie straight debt and mortgage-backed securities in the RP book, right?

MR. JORDAN. Yes, that's conditioned on your finding the foreign sovereigns satisfactory for your purposes.

MR. FISHER. I think that's in the feasible set. That would be an option to consider. I'm not sure we know enough now to determine whether it is feasible and, therefore, whether we would want to set that forward date now. That's part of the exploratory nature of the authority we're looking for in "B."

CHAIRMAN GREENSPAN. Let's always emphasize when we're talking about foreign collateral that it's still a dollar RP. There is no exchange rate risk involved.

If we were to run an exchange rate risk, that's a wholly different ball game. Governor Ferguson.

MR. FERGUSON. I have a couple of questions, Peter. My first may be similar to what President Hoenig was asking. Just this morning we had a discussion about the long term. By doing this exploration of options for the short term, do you see risks that in some sense you might be front-running the Committee and creating a market expectation that in fact the potential long-term solution is very much in a particular direction? Given what I heard this morning, where almost no option seemed to be off the table, I'm a little concerned that we may be creating a presumption either at the Desk or in the markets that this is our preferred long-term solution. In some sense the exploratory process could be viewed as a cat's paw in leading the market toward that assumption. How do you think you can manage that?

MR. FISHER. I don't like the metaphor of either a cat's paw or front-running very much, Governor Ferguson. I don't think we're doing either one. Clearly, as Don and I have both said, it is our preference and intent to have the initial discussion of this be put forward through the Chairman's testimony and the Committee's minutes, in which you have a lot more input than I on how it is styled and stated. I think there are ways to introduce this that make clear both the tentative nature of what we're doing and the fact that we are exploring a lot of options. I think that's something well within our ability to convey.

MR. FERGUSON. Let me ask you two factual questions. The Chairman just said that there is no effective exchange rate risk involved. On page 5 of your memo, one of the things you say is that the margin needed to protect against both the price risk and the exchange rate risk, even for dollar RPs against foreign governments, is uncertain. If we go down this path, how much exchange rate risk is there really? Is it zero? I assume it can be made manageable.

CHAIRMAN GREENSPAN. It could be made almost zero.

MR. FISHER. It can be made effectively zero with daily adjustment of the margins, which is how we would do it. The way I have thought of it is that we would in all likelihood be accepting a rather low rate of return on our RPs of foreign sovereigns because dealing with the System will be relatively unattractive from the perspective of dealers who have those securities in inventory. We will have to be margining for both the exchange rate risk and the underlying price risk. I would note, however, that both the Bank of England and the Swiss National Bank seem to have gotten around that problem and have found ways to make this work for them.

MR. FERGUSON. One sense I would like to convey is that if we do this and the issue of exchange rate risk comes up, I would prefer to give up some return in order to minimize the exchange rate risk.

MR. FISHER. That's how we've thought of it.

MR. FERGUSON. Okay. My other concern is somewhat of an operational question. In terms of the short-term aspects of this, if there are clearing issues, settlement issues, and custody issues, is it your perception that those who run those kinds of infrastructure operations could easily get through the clearing, settlement, and custody concerns? The thought behind my question is that this will effectively be creating a much larger intermarket in some securities and RPs than had existed before.

MR. FISHER. I think it's in the feasible set. I don't know how much software engineering would have to go into it, but it's something that several central banks have set up. We might have to use a broader set of custodians. We currently are relying on Chase and Bank of New York. We might well end up using Euroclear and some of the European based clearing organizations to make this work and that might be rather complicated. There would be legal issues if Euroclear is our custodian for the foreign sovereign repo pool. Nevertheless, in my view it's not just feasible but practical, though I don't know how much time it will take to make preparations to enter that market.

MR. FERGUSON. Okay.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support your recommendation in "B" and I would even support a proposal to expand the set of instruments available to the Desk because I think it's important that you have the flexibility to operate as necessary in markets as they evolve. In practice, however, I believe we need to be careful about moving into sovereign debt because it is in fact a change for us, no matter how we cut it, and it is a substantive change. I'm much less concerned about the mortgage portfolio for the reasons just indicated--that the RPs are set up in such a way that we can protect our position rather easily in a very thick, rich market. I don't have any objections to sovereign debt if you're going to apply the criteria religiously, but it involves crossing a line that is not a minor one. The fact that other central banks do it may not be sufficient reason for explaining why we have not in the past nor why we suddenly would be willing to do so tomorrow. So, to go in that direction I think is a substantive matter.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. I, too, support Peter's proposal to explore the possibility of transactions in municipal and foreign government securities, recognizing that supporting his proposal is not saying that we're ultimately going to approve them for our portfolio. I say that because there are policy as well as operational considerations that we at least have to think about and feel comfortable with before we actually do that. Also, I assume we would be operating in them only on a repo basis.

The other point I want to mention goes back to my comment earlier on government sponsored agencies. I recognize that there is a lot of political concern about our holding issues of those agencies. But with repos we're talking about short-term additions or subtractions of liquidity. And in that regard one of our primary considerations ought to be which markets make the most sense for us to operate in--where we can supply or contract liquidity most easily without having a major market impact. The market for foreign securities is certainly one, if we can resolve the mechanics of doing repos in those securities. But the market for U.S. government agencies is right behind it in terms of size and depth, the numbers of players, the mechanics, operational support, and so forth. To me our biggest subsidy with regard to the government sponsored agencies is not that we participate in this huge market at the margin to supply and contract liquidity but that we are the named fiscal agency for them. They maintain accounts on our books and they use all of our facilities to issue their securities and we provide them with intra-daily liquidity over the book entry wire. To me that's the subsidy we provide--not a subsidy in the market.

VICE CHAIRMAN MCDONOUGH. Amen!

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Peter, if we were to go into foreign sovereign debt in a substantial way--to build on Tony's point that it would involve such a big change--do you worry at all about the possibility of political pressures being brought to bear with respect to the allocation of our holdings across countries? Might we in some circumstances be under pressure for political reasons to do RPs with governments whose credit is a bit frayed around the edges?

MR. FISHER. Let me be careful in my answer. We do RPs with our counterparties and they pledge a mix of collateral that they have in inventory. We can set the credit criteria of what we'll accept. We worked long and hard on the criteria for the investment of our foreign currency reserves, which I discussed with you last fall, in order to make those as objective and bulletproof as possible. Those criteria had nothing to do with GDP weighting or political resources or which countries were big in Europe and which were small. So, if we have clearly articulated objective criteria for what we will take as collateral and adhere to that, I think it would be manageable. And we're only talking about repos, so it would be a question of what the dealers have in inventory, which changes from day to day, and not making outright purchases. I don't want to deny the concern you're addressing, but I think we've defined a series of conditions that make it manageable.

CHAIRMAN GREENSPAN. I think it's important to emphasize that these are transactions with counterparties. Our primary call is against the credit of the counterparty and the collateral is a really secondary issue. One can view that collateral as a debenture against the counterparty. If we emphasize the collateral, I think we could run into the problem that Al Broaddus is talking about. The collateral has to be viewed as a wholly secondary question and the word "haircut" should appear every time we mention collateral.

SEVERAL. Yes.

CHAIRMAN GREENSPAN. Any other further questions or comments? Peter, would you now raise the individual items on which you would like a vote?

MR. FISHER. Yes, thank you.

CHAIRMAN GREENSPAN. Let me just state before we proceed that it is my understanding that the General Counsel is satisfied with the nature of the requests that are being made in this regard. Go ahead.

MR. FISHER. In my memo of January 25th to the Committee I indicated the three proposals on which I'd be asking you to vote. The first one, I hope, involves no controversy. I'd like the Committee to renew for one year the Authorization for Domestic Open Market Operations, substituting 65 business days for the reference to 90 calendar days, with my apologies for bothering you with this. With that amendment, as explained in my memo, I'd ask for a vote to reauthorize the domestic authorization.

CHAIRMAN GREENSPAN. Would somebody like to move that request?

VICE CHAIRMAN MCDONOUGH. Move approval.

CHAIRMAN GREENSPAN. Is there a second?

MS. MINEHAN. Second.

CHAIRMAN GREENSPAN. Without objection, that is approved.

MR. FISHER. Thank you. The second vote is on the Guidelines for the Conduct of System Operations in Federal Agency Issues, which we've just been discussing. I'd like to ask the Committee to extend the temporary suspension of paragraphs 3 through 6 of these Guidelines for one year, until the Committee's first scheduled meeting in 2002.

CHAIRMAN GREENSPAN. Is there any discussion on that issue? If not, would somebody like to move approval?

VICE CHAIRMAN MCDONOUGH. Move approval.

MS. MINEHAN. So moved.

CHAIRMAN GREENSPAN. Without objection, so ordered.

MR. FISHER. Thank you. The third vote, Mr. Chairman, is on the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations. As explained on the second page of my memo, I ask the Committee to reaffirm those documents as they stand.

CHAIRMAN GREENSPAN. Is there discussion?

MR. POOLE. Mr. Chairman, I'd like to comment on the Authorization for Foreign Currency Operations. I wrote out a few notes, which I'm going to read.

I spoke in some detail at our October meeting about foreign exchange market intervention. I continue to oppose intervention and want to discuss briefly some considerations beyond the economic ones I took up in October.

Let me be clear that I am not talking about intervention in emergency circumstances. The Chairman must have authority to intervene in crisis situations, such as those that might arise if a President is assassinated or a war breaks out, or if any of a wide range of unpredictable but terribly serious events should occur. My remarks apply to circumstances in which intervention might be debated for days or even weeks in advance.

Our practices and institution of intervention date from an era in which the FOMC genuinely believed that intervention was a useful tool of economic policy. My sense of current views around this table is that no one wants to make a strong case for intervention and that some members are very much opposed to it. Any intervention today, then, must be for fundamentally non-economic purposes--political purposes, broadly defined, but not partisan political purposes.

The Federal Reserve's reputation and independence depend on the public's viewing us as totally non-partisan and as exercising our best judgment on sound economic policy. We are now in a situation, if I read Committee members' views correctly, in which we are willing to intervene on occasion even though we do not believe that doing so is sound economic policy. How do we justify actions we believe do not represent sound economic policy? Should we be in a position in which we must decide when to say "yes" and when to say "no" to the Treasury on intervention, when the grounds are inherently non-economic? I think not.

Moreover, our intervention resources arise from the Federal Reserve's power to create money. By intervening at the behest of the Treasury, we augment Treasury resources beyond those appropriated by Congress. Someday, someone in Congress will make an issue of that, and we will not in good conscience be able to claim that we have intervened because we believe that intervention represents sound economic policy. I believe that we risk our good reputation by intervening with funds Congress is not willing to appropriate directly. Congress could, after all, increase the size of the Exchange Stabilization Fund at any time.

Another issue that troubles me greatly is that when the United States intervenes at the request of a foreign government or foreign central bank we have no assurance that the intervention plans will be closely held in confidence; we have no control over the process. We are at risk that intervention plans will be disclosed prematurely and that others will trade against us--so called "front-running." Should we ever face a verified case of front-running against our intervention, all hell would--and should--break loose in Congress. I believe very strongly that intervention, if any, should be solely for purposes of U.S. economic policy and should be controlled by the United States. The front-running risk is one we should not take, especially given that the benefits of intervention are so problematic in the first place.

I understand that intervention policies are to be reviewed jointly by the Federal Reserve and the Treasury. Subject to this review, I can vote to support the current foreign currency authorizations. However, I think some discussion of these issues before that review, either now or at a future FOMC meeting, would be useful so that the views of the FOMC as a body could be registered in the review process.

CHAIRMAN GREENSPAN. I think there's fairly general agreement around this table on the principles that you stipulated. You may recall that I said at an earlier time that the proper sequence here is for me to talk to the senior Treasury officials of the new Administration when they are ready to listen, which should be within the next few weeks. What I would like to do when this issue arises is to discuss it with the appropriate Treasury officials, obviously the Secretary of the Treasury and his undersecretaries, and communicate our views. Subsequently, I would report back to this Committee. If we find that there are significant differences of view, we can debate the issues at that time and take a specific Committee position. It may turn out to be moot. Until I am able to raise these issues with the new officials at Treasury I'd suggest that we hold off on our discussion. I will come back and report to the Committee on the views of the Treasury and then we can proceed to have the debate and discussion you are requesting. Is that satisfactory?

MR. POOLE. Yes, thank you.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you. That was very helpful, so I can be brief. Will your discussion include the warehousing facility?

CHAIRMAN GREENSPAN. I think all aspects of this are on the table.

MR. JORDAN. I am not currently a member of the Committee so I won't get a vote this time around, but it's comforting to know these discussions will be taking place before this issue is on our agenda again. With a new Administration, I think this is an especially opportune time--and one we shouldn't miss--to discuss the subject of intervention and find out where we stand.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I assume that we would be better off to have you go into those discussions with the Authorization for Foreign Currency Operations in place, which means we should renew the authorization today.

CHAIRMAN GREENSPAN. I think so.

VICE CHAIRMAN MCDONOUGH. If, as a result of your conversations there is some reason to change it, we can do so later.

CHAIRMAN GREENSPAN. I think that's implicit in the proposal that President Poole made, yes. President Hoenig.

MR. HOENIG. Mr. Chairman, just to clarify: On the request to explore securities of foreign sovereigns for repos--one option we're considering--when you say as we go forward we will give context to this, do you intend that we would have a broader discussion of this whole topic? In other words, here is one solution for the short term. There are other long-term solutions under discussion, so will we provide a full context and not raise expectations that we're looking at foreign sovereigns as our solution for expanding the depth of the market?

CHAIRMAN GREENSPAN. Yes.

MR. HOENIG. Okay, thank you.

VICE CHAIRMAN MCDONOUGH. Do you need a motion for the foreign currency instruments?

CHAIRMAN GREENSPAN. I do indeed.

VICE CHAIRMAN MCDONOUGH. So move.

CHAIRMAN GREENSPAN. Is there a second?

MR. HOENIG. Second.

CHAIRMAN GREENSPAN. Without objection, so be it. When do you want to break for lunch?

MR. BERNARD. Lunch is available.

CHAIRMAN GREENSPAN. I think we are probably at an ideal point to break for lunch and to congratulate ourselves on what in my view has been one of the most successful deliberative sessions this Committee has had in a very long time.

[Lunch recess]

CHAIRMAN GREENSPAN. Let's take a few minutes for Don Kohn to give us his impressions of how we should move forward after this morning's discussion.

MR. KOHN. Thank you, Mr. Chairman. I think there are a couple of avenues on which to proceed forward from here. For the very short run, of course, you have authorized Peter and me to explore with appropriate individuals in the political process and financial markets the possibilities of doing RPs against foreign sovereign and eligible tax-exempt securities. So, obviously, we will begin that process.

Also, a couple of you raised the issue of whether we couldn't buy some GNMAs, and the Desk will take a look at that question. As the Krieger-Madigan paper made clear, there are complications with having them on our balance sheet because of the prepayment risk. But we need to explore that avenue to see whether it can buy us a little more time with an obligation that carries the full faith and credit of the United States Government. We would not undertake any of these endeavors, particularly initiating discussions with anyone outside the System, before we begin the dialogue with the public in an official way. As an initial step we would plan to include at least a brief summary of this morning's discussion--or the points and questions raised--in the Chairman's upcoming testimony on February 13th. That would be one way of getting the issues out on the table publicly. And, of course, the minutes for this meeting will come out in about seven weeks and they presumably would have a somewhat more complete summary of the issues you have discussed. So those two vehicles will be an official way of getting this subject out in the public domain.

We will also take a look at the papers with a view to whether they can be published, perhaps with a little cleaning up here and there. We would have to look carefully at them. Peter and I deliberately did not suggest editorial changes or review them from the perspective that they would be published because we felt everything needed to be on the table for the Committee. So, we would need to go back over them to see what might be sensitive. It will take a little while, but I think we can get the papers--or something that resembles these papers--published, and that will also further the dialogue. So, for the short run one of the primary issues is the public dialogue, which we can work on in several dimensions--with academia, with the Street, and with the political process. That was a rather clear instruction from the Committee.

There was also some coalescence of views about a few other avenues to pursue. Many of you found the ACF worth further exploration, so I think we need to continue that work. We have to figure out how it could be implemented in a practical way. We also need to look carefully at the objections or concerns that were listed in the paper and at some that President McDonough noted with respect to the intersection of the lending and the supervisory functions.

CHAIRMAN GREENSPAN. The Federal Home Loan Bank lending program is a major existing competitor for the ACF. I'd be curious to see how we would view the constraints or opportunities that would arise if the ACF and the Home Loan Bank lending facilities existed concurrently.

MR. KOHN. The study pointed out that to a certain extent the ACF would replace Home Loan Bank advances--not an entirely bad consequence.

CHAIRMAN GREENSPAN. An entirely good consequence if it were true, but I don't--

MR. KOHN. I do believe that there may be lessons to be learned from the experience of the Home Loan Banks.

CHAIRMAN GREENSPAN. You mean that if you give out free money, nobody will take it! [Laughter]

MR. KOHN. Yes, the effects of that free money on the behavior of the depository institutions receiving it would give us some insights into the issues that President McDonough raised in that regard.

VICE CHAIRMAN MCDONOUGH. It is the very active marketing of that facility by the Home Loan Banks that makes me worry about the effect it has on how well people manage their depository institutions.

MR. KOHN. Yes. So the ACF ought to get a very careful look both in terms of lessons to be learned and also practicality. If we were to go forward with it, we would have to address the point that Peter raised about organizing an auction and the concerns that several of you raised about risk management issues and controlling the collateral.

Another issue that many of you talked about was the expansion of the range of collateral eligible in RP operations. Of course, the short-run expedient that Peter and I have proposed would do that to a small extent. Anything else would require a change in the law. But I believe there was enough support around the table for expanding the pool of acceptable RP collateral that, even with the caveat that it would require a change in law, it ought to be one of the first areas we explore. We would do that concurrently with the study of the ACF and some of these other options. If a change in the law is necessary, we ought to know what we want to do and how we want to do it in case we decide to seek legislation.

We should also review the transcript of this morning's discussion to learn more about the longer-term visions a number of you articulated--where you thought we should end up in five or ten years. We ought to be doing our other more practical studies relating to possible adjustments in the shorter term in the context of where you think we need to go in the longer run. So, on a separate track, I'd like to winnow through this morning's commentary to see whether we can narrow down our longer-run goals to perhaps three or four alternatives. And in that regard, I think Al Broaddus's suggestion warrants a closer look. Clearly, everybody is uncomfortable with moving System assets into non-Treasury obligations. If there is a way we could stay in Treasury securities where the costs do not outweigh the benefits, we ought to make sure we've explored that opportunity. Marvin Goodfriend is certain that he can convince me over a couple of beers that this is a good idea, so I'll probably take him up on that. I don't know how many beers it will take! [Laughter]

So, I think that's where we are, Mr. Chairman. To sum up, we will pursue a few avenues immediately, including the initiation of the public dialogue, the possibilities of doing RPs against foreign sovereign and municipal securities, and the GNMA question. In the short run we also will look at the practical operational considerations relating to the ACF and the expansion of RP collateral. And we will continue to work on the longer-run vision of where the Committee may want to go in the timeframe of the next five to ten years.

CHAIRMAN GREENSPAN. When would you contemplate an action-forcing event beginning to emerge? What timeframe for leisurely discussion do we have?

MR. KOHN. Well, we would expect to move forward on some of this work over the next six months--having the public dialogue and assessing the foreign sovereign and municipal securities options. Starting that dialogue in and of itself will spark a lot of debate, so that will be a useful step in the right direction. In our memo we indicated, and Peter reiterated in his comments today, that we can go along for several years, even without increasing our reliance on GSEs--particularly if purchases of foreign sovereigns in some volume turn out to be a feasible alternative--before we'd be absolutely forced to do something. But, of course, well before that several years, we probably would want to be proposing legislative remedies to Congress, given the lags between going to Congress and getting legislation enacted. Also, we're going to be looking very carefully at implementing the ACF. But as a first guess, I think we've got another year or so--probably more--before we would have to start implementing any of these alternatives or go to Congress for enabling legislation, so long as these interim steps work out for us. Is that a fair assessment of the timeframe, Peter?

MR. FISHER. Yes. Also, several members of the Committee mentioned the near-term political uncertainty relating to spending and tax measures under consideration. A year from now we may have budget proposals from this Administration that will provide a clearer picture of when those initiatives might have an impact--in a year or two or three after that. So by then you may feel that a shorter list of options would need to be explored on an expedited basis for that time horizon.

MR. KELLEY. Don, it was fairly late in the morning when the Chairman articulated the concept that this problem may turn out to be an interim one. It could be reversed and go back the other way. To me there is a fair probability that if we view this whole episode in that context, it may change the way we look at some of the alternatives. Of course, how big the problem will be and how long it will last are issues with very wide parameters right now. At any rate, I would suggest that you look at this from that point of view and see how it might influence where we might want to go rather than think of it as an open-ended matter.

MR. KOHN. Right. That's one reason why exploring the ACF and the RP collateral issue has a lot of appeal.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Let me raise one question. I've been pushing for a Lombard facility, as you know. I take it that the sense of the meeting is that if we do that, it would be at best a handmaiden to the ACF. Is it the Committee's view that we ought to see where we are on the ACF first and perhaps take up the issue of the Lombard facility at some future time or should the Lombard facility be taken up as a part of the ACF study and not have it on a separate track? What is the sense of the Committee on this issue?

MR. FISHER. I'm not a member of the Committee, but I'd like to speak for the Desk and its role in conducting open market operations. The Lombard facility would make adjustment credit more useful and increase its use, and that would be a helpful aspect of managing reserves in the banking system. I may be an outlier, but by raising the price I think we actually would reduce the stigma of borrowing and encourage its use. That is counterintuitive but in this situation, given the stigma historically associated with borrowing at the discount window, I think it might work. So, I would hope that discussion of the ACF would not postpone thorough deliberation of the Lombard facility ideas you've been pursuing. That's not a statement regarding where you might feel comfortable moving the rate, which is a matter that the Board would have to decide.

CHAIRMAN GREENSPAN. How do you coordinate a Lombard facility with an auction?

MR. FISHER. They're just different tools.

CHAIRMAN GREENSPAN. If you had a daily auction, you couldn't have a Lombard on top of it, could you?

MS. MINEHAN. Sure you could.

MS. JOHNSON. The Europeans do.

MR. FISHER. Yes, the Lombard facility is for borrowing at the end of the day.

CHAIRMAN GREENSPAN. In other words, it couldn't be an auction at the end of the day?

MR. FISHER. No, it's not an auction; it's discount window borrowing.

MS. JOHNSON. In those countries that have both auctions and Lombard facilities--the Swiss, for example--the Lombard rate is defined as x basis points over the auction rate. So it moves constantly with the auction rate.

MS. MINEHAN. I was going to make the point that when we talk about repos, cash is the other side of a security repo. There is little difference between auctioning repos and auctioning deposits. It's just looking at the process from the other side. RPs would be done in the morning when all the other auction activity occurs. That might involve a broader range of financial institutions and a broader range of collateral, but that's a morning activity. Filling the gap is what happens in the evening at whatever rate --and whatever we call it--and it is totally different.

MR. FISHER. Let me interject to avoid a misconception. In all likelihood we would institute a next-day settlement for an auction among the 8,000 or so depository institutions that might be eligible to participate. Such an auction may not even be in the realm of possibility for adjusting today's reserves, whereas the discount window is really about letting the banking system settle on a same-day basis.

CHAIRMAN GREENSPAN. That was the basic reason.

VICE CHAIRMAN MCDONOUGH. I share Peter's view that if the Lombard rate, or whatever we call it, were above the fed funds rate--which is where it ought to be--institutions would be much more likely to use the window.

CHAIRMAN GREENSPAN. In other words, it's like people who buy luxury cars. They can afford it! [Laughter]

VICE CHAIRMAN MCDONOUGH. Exactly. I was a CFO in the heyday of banks worrying about going to the window. I can't tell you how many banks had somebody assigned to kick the computer from time to time so it would stop working and the bank could pretend that it didn't know its reserve position!

MR. GRAMLICH. I'm still wondering what we ought to do about discussing the Lombard facility. Should we take it up on a separate track or consider it with the

ACF as one of the options? In a way I'd like to see it tied to the ACF. It is part of a whole package.

MR. KOHN. But I think the ACF is key to a different problem. The Lombard is conceptually separate and it might even confuse matters to tie it with the ACF.

MR. GRAMLICH. So should I keep pushing? [Laughter]

MR. POOLE. Yes.

MR. GRAMLICH. Okay.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you. I have a question on the very short term for Peter and one on the longer horizon for Don. Peter, based on our experience in April of the last two years, what is the order of magnitude of the challenge you are expecting this April?

MR. FISHER. The Treasury keeps telling us that they will have enough capacity in the TT&L system and I keep worrying that they won't. But I don't have a good handle on that. Sandy, do you want to comment?

MS. KRIEGER. Last year was not terrible. They managed their cash better. This year probably won't be awful, but I doubt that they will have enough capacity. Capacity is likely to fall rather than rise as a result of a number of other developments.

MR. JORDAN. I know that problem only comes up once a year, but it appears to have become a big challenge.

MS. KRIEGER. It can be.

MR. JORDAN. On the longer term, I'm glad you're going to be thinking about the vision for the future and would ask whether you plan to include in that some issues related to the liability side of the balance sheet and to other institutional arrangements. Twenty years ago we began implementing a new regime, mandated by legislation, with regard to the structure of reserve requirements, the balances that must be held with us. The system has evolved into one that can be thought of as comprising a fortnight positive balance, based on a number of criteria, and an overnight, 24-hour non-negative balance. We have in a sense a two-tier reserve requirement system imposed on certain types or classes of deposit liabilities. If one thinks out very far into the future, a lot of nomenclature we use is not terribly useful with regard to how we determine what is a deposit, what is a transaction deposit, and what is or is not a clearing balance.

In various places around the world these concepts are evolving into a different kind of structure. If we contemplate a long enough period, 10 years or more, we might envision an opportunity for legislation--on these asset-side issues or for whatever reason --to which we may want to attach some desired changes on the liability side. It might give us the opportunity to evolve toward a different system whereby the liabilities of those institutions that have an account with us are subject to a liability on our account balance sheets at some specified frequency. I would like to imagine that we could move toward non-negative hourly balances at some time in the future. The technology is going to be there. But the daylight overdraft and the overnight overdraft problems are part of the structural framework where changes could address my concerns about Ned's NACF. If I knew what was going to happen on that side, then I could get a lot more comfortable with his concept of NACF. But the NACF as it is, without doing some of these other things, has too many uncertainties in terms of how it might be gamed by depository institutions to allow me to feel comfortable with it right now. But I could get comfortable if I knew of enough other changes we were going to implement.

MR. KOHN. I think there's a potential problem of overloading the system by trying to do too many things at the same time. One issue we've been tackling involved trying to pay interest on reserves.

MR. JORDAN. Which I'm opposed to but--

MR. KOHN. We've been unsuccessful in doing that and I don't think we're likely to be successful. We can take a look at this idea to see if perhaps something on that side is worth exploring. But I would hesitate to commit to a major study about reserve requirements and the clearing balances system when we're trying to work on these other projects at the same time. However, if the Committee and the Board think there are issues to be explored there, we should find the resources to do it.

MR. JORDAN. I'll pay for the fourth beer and Marvin can convince you!

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Let me just clarify something. Are we looking at the ACF or the NACF?

MR. KOHN. ACF.

MS. MINEHAN. The NACF is more or less off the table, right?

MR. KOHN. That was my understanding, yes.

MS. MINEHAN. Okay, I was a little confused on that.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. First I want to respond briefly to Jerry Jordan and support what Don said. If it's only a question of a few beers and pretzels, then I'd be supportive of looking at both sides of the balance sheet. If it involves anything more than that, I would suggest that we stay focused at this stage only on the one side of it.

I'm assuming that implicit in what I heard you say is that you're going to come back by when--midyear--to try to give us some sense of your views about the short-term options?

MR. KOHN. Right. Certainly on the short-run issues we would have to come back to you and we will provide an update on where we are on these longer-term efforts as well. It needs to be fewer than eight months before the Committee is next apprised of what the staff is doing in this area. In addition, we will keep you informed about our plans as we winnow them down and we will come back to consult on where you think we ought to be going.

MR. FERGUSON. Okay.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. In my view your agenda list is exactly right. One request I would make is that you not think about the ACF process in a manner that is overly complicated. At the end of the day we're talking about the potential of an occasional auction that is routinely offered--it could be once a month--for a block of funds that would provide a base. It doesn't have to be elaborate. It doesn't have to be daily. It doesn't have to be complicated even with 8,000 bidders. I believe we can actually get where we want to go in a rather straightforward manner just by dealing with the question at hand, which is: Is there a way to make some funds available in the financial sector by means of the ACF?

CHAIRMAN GREENSPAN. Is everybody finished with this discussion? We can now go back to the usual meeting agenda! Peter.

MR. FISHER. Thank you, Mr. Chairman. I'll be referring to the familiar package of charts with a Class II peach cover. 1/

The first chart depicts current and forward deposit rates. U.S. rates declined sharply following the Committee's January 3rd reduction of the fed funds target rate by 50 basis points. But the change in expectations has been noticeably less for rates 12 months out than for rates in the next six months.

The current 3-month rate, the solid red line, fell by about 70 basis points in the couple of days immediately after the announcement and is now 80 basis points below its level in late December. The 3-month forward rate is now roughly 60 basis points below where it was at year-end whereas the 9-month forward rate, after initially falling by about 40 basis points from its late December level, is now back up to where it was just before the year-end. In fact, though you can't quite see it on this chart, the 9-month forward 3-month rate is a couple of basis points above the 3-month forward rate, showing some reduced expectations of easing that may have been priced in further out in the calendar.

Euro rates fell modestly in sympathy with dollar rates after the Committee's action earlier this month. However, the 9-month forward euro rate is now back to where it ended last year. Rates in Japan have been grinding lower in light of the deteriorating outlook for the Japanese economy, which Karen will be discussing.

Turning to the second page, I've included a new set of charts that provide a different indicator of financial conditions. The top panel depicts two-year government yields for several countries less their central bank's short-term policy rate. Now, these involve slightly different maturities in the different countries as explained in the bottom footnote, but it gives some sense of the inversion of the short end of the yield curve between very short-term rates and the two-year rate. In the bottom panel, the same concept is depicted but with the substitution of the swap rate for the government yield--and thus the difference between the top panel, where we used German government yields and the bottom panel which has the euro-area swap rate.

1/ A copy of the charts is appended to this transcript. (Appendix 1)

In the top panel you can see that in the United Kingdom, the United States, and Canada the two-year notes first moved below the short-term policy rates last summer. In contrast, against the two-year swap rate shown in the bottom panel, the inversion really only began later in the year, around mid-November. The important question one could try to answer is the extent to which a consistency in the movement toward an inverted short end reflects an independent but parallel firming of conditions in each country or the influence of dollar interest rates and U.S. financial conditions on other markets. I don't think it's necessary to try to resolve that debate; it may never be possible to resolve it. Instead, if we recognize this spread as an indicator of monetary tightness, it is clear that conditions were rather tight by the end of last year and have only eased a little since then in a number of markets.

Turning to page 3, the top panel shows changes in the G-3 trade-weighted currencies since November 1st, using the Bank of England's indices. While there has been a lot of talk about dollar weakness, you can see there that the yen is down by 10 percent and that the euro is up by about 7 percent, though off its peak. But the dollar is not much changed, at least through last Friday's close, although it may be off a bit today.

The bottom panel depicts the differential that I showed you last time between dollar and euro 2- and 10-year swap rates. Since your action on the 3rd of January, the 2-year differential has narrowed considerably and noticeably--through 80 basis points--and now stands just around 75 basis points. On the other hand, the 10-year differential has widened from about 50 basis points at the beginning of the month to roughly 75 basis points or thereabouts now.

In the 2-year area it's relatively easy to see that the markets place a greater likelihood on easing by the Fed than by the ECB going forward, and that would be an explanation for the narrowing of the 2-year differentials. The widening of the differential in the 10-year area seems mostly to have come on our side of the equation. It shows the swap yields moving in sympathy with Treasury rates. I'll discuss that on the next page.

The charts on page 4 are four snapshots of yield curves on dates of Committee meetings or policy actions since November and as of last Friday, January 26th. If you compare Friday's rates, shown in the lower right-hand panel, with those at the upper right on the day of the December 19th FOMC meeting, you can see that at the short end rates on all four of these yield curves are noticeably lower. At the long end, however, the industrial indices are slightly lower and the swap and Treasury rates are slightly higher. I'd be careful on my analysis here and begin by saying that this is a fairly brief period from which to draw any particularly profound conclusions. But I think the corporate yields have declined modestly on a combination of factors--reduced issuance and a marginal increase in risk appetites relative to late December when the market was fairly risk averse, as investors have begun to reach for yield. The modest rise in U.S. Treasury and swap yields reflects the other side of that. I see some return of risk appetites, which has shifted investors out of the long end of the Treasury curve into the short end, where they were looking for a bit of a rally, and also into higher yielding corporate securities.

Also, compared with where rates were, certainly in November-December, expectations of a reduced volume of Treasury buybacks and shifts in the outlook for fiscal policy, given the heightened prospects for tax cuts, may be influencing this slight backup in the long end. There may also be some shift in inflation expectations, but I think we have to be careful here. While the 10-year TIPS spread has widened from its level of about 130 basis points in late December to around 170-175 basis points now, that only brought the spread back its level in late November, which was still 25 basis points below where it was in early November. So, there's probably more noise in the positioning in these markets than in the underlying data from these periods. All in all, I'd put a little more weight on the short-term positioning story than on the unwinding of the extreme risk aversion we had at year-end.

Turning to the next page, the unwinding of the risk aversion was somewhat more short-lived in the commercial paper market. The top panels are comparable to the ones I included last month on 30-day and 90-day commercial paper spreads. The bottom panels provide detail on the levels of 30-day and 90-day commercial paper rates. The bold red lines in the top panels show the extraordinary extent to which the spreads of A2/P2 to A1/P1 widened out this year compared with the previous four years.

The combination of crossing the calendar year-end date and the Committee's rate cut at the start of the year clearly gave a jolt to the commercial paper market, and people felt a lot better about things. But by the middle of January the worsening conditions in the California energy area became apparent. So I think the deterioration in the outlook for the utilities reminded the market about the deteriorating outlook for earnings more generally and contributed to this return to a picture of extreme risk aversion in the commercial paper market.

Turning to domestic operations, on the top of the next page is a panel similar to the ones I've shown you before. The orange lines and dots indicate the drain in reserves since early October from the impact of changes in autonomous factors. The green line shows how much more has been drained by net Treasury redemptions. Comparing the actual with the dashed orange lines--our projections--shows that currency grew more than we had projected for the turn of the year period, and reflows really didn't get us back to the level we had projected. The pace of the reflow was about what we were forecasting, but from a much higher level that doesn't seem to be coming down as fast as we had expected.

In the bottom panel you can see how we've managed the relationship between 28-day RPs and our shorter-term RPs. We're working down the book of 28-day RPs from the $23 billion held at year-end, and we now have about $12 billion.

Turning to the last page of my packet, I thought I'd discuss briefly the extended reserve outlook through the first half of this year. Working down from the top of the page, on a maintenance period average basis, we expect from now until the end of June--and these are rough forecasts--the net impact from factor movements, mostly currency, to drain about $6 billion. And the impact of anticipated net redemptions by the Treasury should drain another $10 billion--that's probably a low-end estimate but one that's rather complicated to forecast--for a total drain of about $16 billion.

Below that I've shown two examples of how we might proceed if we try to reduce the term RP book. Case "A" depicts the impact of reducing term RPs to zero on a maintenance period average basis, the numbers I've been talking about here. In that scenario we would have drains of another $19 billion and would face reserve needs of $35 billion. If we put the term RP book to zero, that would imply $35 billion in outright purchases of Treasury securities. If we were thinking of working the RP book down to about $10 billion, shown as Case "B," that would imply outright Treasury purchases of about $25 billion from now to midyear. My own comfort zone is closer to the latter scenario, and that's the approach I would intend to pursue. I'd like to note again that the net redemption estimate may be low and that we could face a challenge of higher net redemptions. There is a lot of uncertainty about the Treasury's issuance pattern.

Mr. Chairman, we had no foreign exchange intervention operations to report. I'd be happy to answer any questions, and I'll need a ratification of the Desk's domestic operations.

CHAIRMAN GREENSPAN. Questions? Yes, President Minehan.

MS. MINEHAN. Just bear with me. This might be a dumb question, but why are we focused on reducing the amount of term RPs?

MR. FISHER. I am focusing on it as the residual. It's not a dumb question, Cathy. I probably didn't make myself clear, so let me try to do that. In 1998 and prior years we purchased Treasury securities outright to meet the growth in underlying factors, and repos were used simply to deal with short-term fluctuations. As I tried to explain this morning, we have shifted our approach markedly in the past two years. We now purchase Treasuries outright at a pace that, were it much faster, could result in our being a disturbance to the market. That is my concern. I can't put a fine point on it, but I work this out with Bob Elsasser, who heads our government securities staff. We look at the schedule of the Treasury's buybacks and its issuance of various securities. We look at our pace of accumulation and try to assess its effect on the Treasury market.

In 1998 we purchased $35 billion in the first half of the year and that put us on pace for an all-time record accumulation of roughly $45 billion that year. And by all accounts we were pushing the market. I'd like to try to step back from that pace of accumulation. Now, even $25 billion of outright Treasury purchases in the first half of this year and another $25 billion in the second half will result in a record-breaking amount again this year. I'd like to correct any misimpression members of the Committee may have. The numbers I cited are gross accumulations--not net--of Treasuries bought on an outright basis. I'm only telling the Committee that I would prefer to continue to run a term repo book of around $10 billion and take the risk that the repo book might grow a bit more--say, to $15 billion--if net Treasury debt redemptions run faster. I'm just trying to spell out for the Committee what we are planning to do.

MS. MINEHAN. I got your message of concern about outright purchases. Maybe it's the terminology that's not sinking into my head. You are making the distinction between term RPs and outrights. Is that right?

MR. FISHER. Yes, and shorter-term RPs--five-day, three-day, two-day.

MS. MINEHAN. So you are concerned about the amount of outrights but you also want to reduce the amount of long-term repos?

MR. FISHER. My preference would be not to reduce the book of long-term RPs. I'm telling the Committee that I do not plan to reduce it to zero.

MS. MINEHAN. But you are planning to reduce it from $19 billion to $10 billion?

MR. FISHER. On just a pure maintenance period average basis, yes, we are going to move into the area of $10 billion. Forgive me, Cathy, it's my lack of clarity. There is a risk that redemptions will be higher or that some reserve factors will grow faster than projected. If that happens, we could have a larger RP book between now and June. That's why even if we get it down to $10 billion, it might at some point have to go back up to $15 billion or even $20 billion if other factors alter our reserve needs.

MS. MINEHAN. Basically you're saying, ceteris paribus, that you are more or less going with case "B"?

MR. FISHER. Case "B" is what we'll be aiming at. That is what I'm saying. My apologies!

VICE CHAIRMAN MCDONOUGH. The key is that the term RP is the residual. That's his fudge factor.

MS. MINEHAN. I realize that. I just wondered why he was so intent on reducing that residual. Why not let that residual be what it needs to be?

MR. FISHER. When the Committee discussed this topic a year ago at the February FOMC meeting and again in March some members expressed concern about a large repo book against a mixed pool of collateral. I'm trying to run a middle ground between those concerns, which I understand, and--

MS. MINEHAN. Maybe I don't understand what was behind the authorization we approved earlier today. We extended, albeit just for another year, the same authorizations we gave you for two years running. That is, you were authorized basically to go along the same track you've been on and to explore diversification--not with an idea of reducing the amount of RPs you've been doing, but rather adding to the pool of collateral that you can use to expand your holdings of RPs. That doesn't say to me that you would like to cut your term RPs in half. I know I'm not getting this!

MR. FISHER. I think you've expressed it very well, Cathy. I'm suggesting that taking the longer-term RP book down to $10 billion is a target but that faster growth in reserve factors or higher Treasury redemptions would tend to push it back up toward $20 billion, though I don't know quite how much. So the “fudge factor” is $10 billion to $20 billion.

MS. MINEHAN. It’s ceteris paribus, in other words.

MR. FISHER. Yes.

MS. MINEHAN. You plan to be at $10 billion but you want to have the leeway to keep it where it is?

MR. FISHER. Yes.

MS. MINEHAN. All right, I understand!

MR. GRAMLICH. May I come in on this point? If I'm hearing you right, Cathy, you're asking why he doesn't take it down not to $10 billion but to $15 billion or $18 billion, right?

MS. MINEHAN. I'm wondering why he wants to take it down. I think he's telling me that he's taking it down so he has the leeway to take it back up again.

MR. GRAMLICH. Yes.

MR. FISHER. We don't need to be driven by habit. But after Y2K we had a term RP book of $140 billion. We were able to wind that down to about $10 billion, given the pace of outright accumulation we were comfortable with. That's where we were last August.

MS. MINEHAN. Okay.

MR. FISHER. The book then grew to about $23 billion at year-end and we're in the process of getting that level back down.

MS. MINEHAN. I understand.

MR. FISHER. That level, though, may be higher than $10 billion, as I see it.

MS. MINEHAN. I understand finally. I'm sorry!

MR. FISHER. No apologies required!

CHAIRMAN GREENSPAN. Further questions?

VICE CHAIRMAN MCDONOUGH. I move approval of the domestic operations, Mr. Chairman.

CHAIRMAN GREENSPAN. Thank you, Mr. Vice Chair. Without objection they are approved. Let's move on to the staff report. David Stockton, Karen Johnson, and Larry Slifman--an awesome trio!

MR. SLIFMAN. We will be referring to the package of materials you've received, entitled "Staff Presentation on the Economic Outlook." 2/

As you know from the Greenbook, we are expecting a sharp deceleration of production in the first half of 2001, as shown in line 1 of the table in your first exhibit. This pattern reflects, in part, a pronounced drag on real GDP from inventory investment (line 5) as firms seek to bring their stocks into better alignment with sales. But it also reflects a notable slowing in the pace of final demand. In particular, as shown on line 2 of the table, private domestic final purchases are projected to rise at only a 1.4 percent pace in the first half of this year, with both consumption (line 3) and business investment in equipment and software (line 4) relatively weak.

A number of forces seemed to come together in the latter part of last year to damp the growth of aggregate demand. Among these were the rise in energy prices, waning wealth effects, and the earlier tightening of monetary policy. In addition, domestic production was curbed by the strength of the dollar. As I will discuss shortly, many of these restraining influences turn more favorable fairly soon in our projection and begin to provide support to economic activity. Moreover, the drag from the inventory adjustment abates after midyear. Reflecting these influences, real GDP growth is expected to pick up in the second half of this year and to grow at close to potential next year.

With real GDP rising at a rate slower than that of potential--especially this year--the unemployment rate rises. By the end of 2001, the jobless rate is projected to reach 5.2 percent and unemployment then rises a bit further in 2002. The widening slack

2/ A copy of "Materials for Staff Presentation on the Economic Outlook" is appended to this transcript. (Appendix 2) in labor and product markets and a drop-off in energy prices reduce inflation this year and next to around 1-3/4 percent, when measured in terms of the PCE price index.

Your next chart summarizes some of the key background factors of our forecast. For our baseline projection, we have assumed a 25 basis point cut in the funds rate at this meeting and then a flat funds rate through 2002. Our other financial assumptions include a near-term decline in the stock market with a leveling out thereafter. This implies a falling wealth-income ratio through the end of the projection period. Long-term corporate interest rates remain near current levels and risk spreads on corporate bonds, which already are high by historical standards, stay elevated. Reflecting our financial assumptions and the projection for activity here and abroad, we expect the foreign exchange value of the dollar to decline moderately. Fiscal policy also is assumed to be stimulative next year. And finally, prices of oil and natural gas are expected to recede over the next two years, consistent with quotes in the futures markets.

The next chart looks at the question: What has been happening to some of the high frequency indicators of activity, and how does their current behavior compare with the 1990-91 recession? As you can see, many of the high frequency data series that we follow have turned sour recently. The process seems to have been kicked off by a weakening demand for consumer durable goods--autos as well as other big-ticket items--and for capital goods (the upper two panels of the chart). Comparing the recent experience with the shaded areas, the declines in the consumer sector are on a par with those seen in 1990-91, while the drop in capital goods orders is steeper. The resulting cutbacks in production have been widespread. The middle left panel shows a diffusion index of three-month changes in manufacturing industrial production. You can see that since the middle of last year the preponderance of manufacturing industries have been cutting production. Indeed, the recent pattern of this index looks increasingly similar to what happened in 1990. Accompanying the reduction in production has been a spate of layoffs and an upward climb in initial claims for unemployment insurance. The actual layoffs that have occurred, and the fear of more to come, have taken a dramatic toll on consumer confidence. The lower left panel shows the Michigan survey's index of consumer sentiment. And, as you can see on the table we distributed at the lunch break, the Conference Board's expectations index, which was released this morning, also fell sharply in January.

One bright spot in all of this gloom is the housing sector, where activity measures such as permits for single-family units, after receding in early 2000, have stabilized more or less in recent months at a fairly high level; this stands in sharp contrast to the plunge during 1990. In addition, anecdotal reports on consumer activity in January suggest that spending steadied or perhaps turned up.

Your next chart addresses the question: What are the near-term dynamics of our forecast? It is clear that the extent of the weakness in final demand that emerged in the latter part of 2000 came as a surprise to many businesses. As a result, buildups of inventories were widespread across manufacturing. The most well-publicized has been the accumulation of light motor vehicles, and the production adjustments in that sector recently have been quite deep--the upper two panels. A similar story of excess inventories can be told for other manufacturers as well--the middle left panel. Businesses in some industries, such as construction supplies and industrial materials, already have cut production dramatically, and their inventories should be brought into better balance fairly soon. However, the reductions in output for many of the industries within the machinery and equipment categories have been relatively small thus far, and further declines in the next few months are likely before the overall factory stock overhang is worked off.

So, what keeps things from building on themselves and the economy from collapsing into recession? As I will discuss shortly, we think the fundamental determinants of final demand are sound. Consequently, we see the current situation as one in which production is fluctuating around a comparatively well-maintained final sales path in order to bring actual and desired inventories into better balance. In our forecast this adjustment occurs very promptly. We expect manufacturers to slash production at a 7-1/2 percent annual rate in the current quarter, and factory output is projected to edge up only slightly next quarter. As shown on line 2 of the table at the lower left, the sharp drop in factory production accounts for the bulk of the near-term movements in real GDP.

The lower right panel translates this into more familiar NIPA terms. The dark bars show the growth rate of final sales and the red bars show the growth rate of the stock of inventories. In our projection, the stock of nonfarm inventories is virtually unchanged during the first half of this year, while final sales grow moderately. As a result, we expect the bulk of the inventory overhangs to be worked off by the middle of this year. It is this rapid response by manufacturers that helps check a broader and deeper unwinding of activity. But an important risk to the forecast, and one that we explored in the "recession" alternative in Part 1 of the Greenbook, is that the abruptness of the production cuts and the recent torrent of layoff announcements--such as yesterday's from Daimler Chrysler--might lead to a severe break in consumer and business confidence. That in turn could cause a sizable contraction of final sales, with all the attendant multiplier and accelerator effects on GDP.

In the context of our baseline forecast, however, one might ask: What are the fundamental forces supporting the expected reacceleration of aggregate demand? That question is addressed in chart 5. The first fundamental is monetary policy. The upper left panel shows the effects of changes in the real funds rate on GDP growth since the third quarter of 1998, as estimated by the Board's FRB/US econometric model. As you can see, the model suggests that the rate hikes initiated in mid-1999 damped GDP growth considerably during 2000. The move taken on January 3 of this year, along with the further easing action assumed in our forecast, should begin to ease some of the earlier restraint in the next few months. The degree of restraint progressively lessens through most of 2002. The assumed changes in discretionary fiscal policy, as measured by our fiscal impetus indicator, also are projected to boost aggregate demand, adding about a quarter of a percentage point to GDP growth next year, according to the FRB/US model.

In terms of the components of GDP, we think the fundamentals for both business investment and consumer spending will be supportive. Looking at investment first, the actual and assumed easing of monetary policy and the ongoing descent in the relative prices of business equipment are expected to lead to further declines in the user cost of capital--the middle left panel. Moreover, the banking system is vastly more sound than it was a decade ago, and we don't see much in the way of financial headwinds that would impede funding for worthy projects. Consequently, we are projecting an acceleration in capital spending later this year and another sizable pickup next year.

For the consumer sector, activity should be boosted by the projected drop in energy prices. The lower left panel shows a rough back-of-the-envelope estimate of the direct effects of changes in oil and natural gas prices on the growth rate of real PCE. As you can see, after the first quarter of 2001, the depressing effects of last year's energy spike begin to unwind and the expected declines in those prices then contribute to PCE growth.

Last, but certainly not least, a critical fundamental factor supporting activity is our belief that multifactor productivity and overall structural labor productivity are still growing rapidly. Dave will talk about our productivity projection shortly. Suffice it to say, however, that the effects of this assumption permeate the forecast. For one, the rapid growth of structural productivity is reflected in a strong expansion of permanent income, and, after the economy passes through the current inventory correction, in actual income as well. Indeed, as you can see in the lower right panel, we expect before-tax real personal income to rise 3-1/2 percent next year--about the same as in 1999 and 2000. This, of course, is an important force supporting consumption growth throughout the projection period.

Dave will now continue our presentation.

MR. STOCKTON. As Larry has just noted, our expectation that the growth of structural labor productivity will be well maintained over the next few years is a key element supporting aggregate demand during the projection period, while at the same time also helping to limit inflation pressures. The upper panel of your next chart lays out the details of the supply side of our projection. As can be seen on line 1, we expect growth of potential GDP to remain above 4 percent over the projection period. The slight downward tilt to the growth of potential results from a somewhat diminished contribution from the pace of capital deepening between 2000 and 2002--line 4.

The weakness that we are projecting for investment spending in coming quarters does cause the growth of capital services, shown in the middle left panel, to tail off a bit from its recent rate of increase. But with the level of investment having reached such lofty heights in recent years, we continue to anticipate that the growth of capital services will remain elevated over the next two years.

We also expect the growth of structural multifactor productivity to remain at a 1-1/2 percent annual pace over the next couple of years. As can be seen in the middle right panel, there has been a dramatic improvement in the growth of structural MFP over the past decade--an acceleration of more than 1 percentage point. At first blush, it may appear ambitious to project that all of this recent pickup can be sustained going forward. But as can be seen by the red line, the acceleration of the past decade has lifted the growth of multifactor productivity to a pace only just a little above the average of the past one hundred years. Consequently, we don’t view our productivity forecast as being an especially long stretch.

Our relatively optimistic outlook received support from the performance of output per hour in the second half of last year. The lower left panel plots the growth in nonfarm business output decomposed into the growth of hours--the red shaded area--and the growth of output per hour--the gray shaded area. The speed and magnitude of the adjustment of hours growth is quite noteworthy, and it resulted in productivity gains being well maintained in the second half despite the sharp slowing of output growth. This certainly doesn't settle the issue of how much of the gain in productivity that we have seen in recent years is cyclical and how much is structural. But it is the first shred of evidence on the point and bolsters the case for structural improvement. As shown to the right, we don't think labor productivity will escape entirely unscathed from the sharp slowdown that we are projecting for activity. We anticipate growth of productivity to slip below 1 percent in the first half of the year, before rebounding to around trend over the remainder of the projection period.

Turning to your next chart, the upper left panel depicts the GDP gap. With the growth of potential output remaining relatively robust, the slowdown in real GDP that occurred over the second half of last year and that is projected to intensify in the first half of this year leads output to dip below potential in 2001. The unemployment rate--shown at the right--is expected to rise sharply in coming months, reaching 4-3/4 percent by midyear and 5-1/4 percent by the fourth quarter.

The middle left panel places this projected rise in the jobless rate in a cyclical context, an issue that was raised at the last meeting. In the chart I have plotted the maximum and minimum rise in the unemployment rate around postwar cyclical low points in the series. I have also included our forecast--the black dashed line--using the fourth quarter of last year as the reference point. Although we are not projecting what would conventionally be classified as a recession when viewed in terms of real GDP growth, the expected slowdown in activity produces an increase in the unemployment rate that is similar to a mild recession. In our forecast, both the level and the change in labor market tightness hold down nominal wage demands as the year progresses.

Moreover, there is little evidence that changes in inflation expectations, shown to the right, will be exerting any pressure on wage demands. Both the Michigan survey and the Philadelphia Fed survey showed some pickup between 1999 and 2000 but most recently have been moving sideways. All told, we are projecting that hourly labor compensation--measured by both the ECI, the black line in the lower left panel, and nonfarm business compensation, the red line--should decelerate from the pace seen last year.

The increase in actual unit labor costs, shown in the first column of the lower right panel, is expected to move up this year owing to the cyclical slowing in productivity that I mentioned earlier. But adjusting for that cyclical slowdown in productivity, trend unit labor costs--the measure we have found to have the most predictive content for prices--should slow gradually over the projection period.

In addition to subdued labor cost pressures going forward, there are a few other factors--highlighted in your next exhibit--that eventually should help restrain price inflation. As can be seen in the upper left panel, core intermediate materials prices--the black line--already have softened in response to the drop in capacity utilization that has accompanied the slowdown in the industrial sector. And we anticipate very small increases in materials prices going forward.

As you know, energy prices have dominated movements in headline inflation over the past year, and we see some considerable further upward pressure early this year. But as Larry noted, we expect energy prices to decline later in the year, in line with the expectations registered in futures markets. With respect to petroleum-based products--the upper right panel--we are expecting a resumption of declines in gasoline and fuel oil prices by early spring. By contrast, the upward trajectory for the retail price of natural gas is expected to steepen further over the next few months before retreating later this year. Aside from a near-term jump in consumer electricity prices associated with the rate increase that went into effect in California this month, we don't expect a great deal of price action here, at least relative to the other sectors of the energy market.

The middle right panel summarizes these influences in terms of their direct effects on PCE price inflation--the black bars--and an estimate of their indirect effects on PCE inflation--the red bars--through the prices of energy-consuming goods and services. Taken together, we expect the direct effects of energy prices to subtract about 1/4 percentage point from total PCE price inflation this year, after a large positive contribution last year. Owing to lags in pass-through, the indirect effects remain a small, though diminishing, upward influence on inflation this year. By next year, both the direct and indirect effects should help to hold down overall price inflation.

Largely reflecting these energy developments, we are expecting both total PCE price inflation and total CPI inflation--

shown in the table at the lower left--to be headed down this year. Because energy prices have a larger weight in the CPI than in the PCE price measure, the deceleration is more pronounced for the CPI.

In general, we are expecting core consumer prices to move a bit lower over the projection period. As we have noted on a number of occasions, we believe that the core PCE--shown as the black line in the lower right panel--has probably understated the pickup in inflation over the past couple of years because of its inclusion of imputed service charges, which are statistical constructions of the BEA rather than measured prices. Those imputed prices have risen at an unusually slow pace recently, and in our forecast we project the increases in those prices to return closer to historical norms this year. If this comes to pass, then an uptick in core PCE inflation could obscure for a time the downward trend that we expect to become apparent in the market-based measure--the red line--and for that matter in the core CPI.

Your next two charts focus on some implications of the productivity risks in our projection--risks that we discussed in the Greenbook and Bluebook. Both the buoyancy of aggregate demand and the relatively subdued performance of inflation in our forecast depend importantly on our analysis of structural productivity. As we considered those influences on the economy that could lead the current slowdown to become a much more protracted period of poor economic performance, disappointments on productivity seemed to hold the greatest potential for damage.

There have been a few straws in the wind that could make one nervous. As seen in the upper left panel, computer prices fell last year at about half the rate of the 1995 to 1999 period. We think most of that slower decline was associated with the strong demand and capacity problems for components that existed early in the year. More recently prices again have begun dropping more rapidly, at a pace consistent with our forecast. But we can not rule out some diminution in the pace of technical progress here. Long-term earnings expectations, another indirect indicator--shown in the upper right panel--have tipped down over the past few months. But as you can see, there have been a few declines in that series amidst the general upward trend of the past six years. Finally, the return to capital--the middle panel--has leveled out of late, and we are forecasting some decline over the next two years.

For the reasons that I outlined earlier, we do not believe that these indicators are yet pointing to a significant inflection point in productivity growth. We project growth in labor productivity over the next five years--the black line in the lower panel--to remain near 3 percent. But recognizing this as a risk to our projection, we considered the consequences of growth in labor productivity returning to the 1-1/2 percent pace of the two decades prior to 1995. Under this scenario, one could view the recent technological wave as having played out. In effect, we may have reached the top of the S-curve, which with a healthy dose of imagination you can see in the lower panel as the shallower extension of productivity shown in red.

The consequences of such a productivity disappointment are compared to the Greenbook baseline in your next chart. In order to show something approaching a worst-case scenario, we have assumed in the simulation that economic agents recognize the full extent of their misjudgment about productivity early this year. This precipitates a sharp 30 percent drop in the stock market. The growth of real GDP under the assumption of an unchanged real federal funds rate--the red line in the chart to the right--is considerably lower than in the baseline--the black line. With the demand-side effects weighing heavily on the economy when the real interest rate is held constant, the meager gains in real GDP fall short of even the reduced growth of potential, and there is a steady rise in the unemployment rate--the middle left panel. Despite the higher unemployment rate, for the next four years there is no favorable feedback to price inflation--shown at the right--because of the boost to unit labor costs implied by the slower productivity growth. Profits--the lower left panel--are hammered by that pickup in labor costs.

In these circumstances, the Taylor rule calls for a steady reduction in the nominal federal funds rate. Most of this decline reflects the drop in the equilibrium federal funds rate that follows from the slower growth of productivity. This is, in essence, the mirror image of the rise in the equilibrium rate in recent years that occurred as productivity accelerated. Returning to the blue lines in the upper panels, the gradual reduction in the funds rate cushions the drop in the stock market and provides some boost to the growth of real GDP. As a result, the unemployment rate--the middle left--is lower than when the real funds rate is held unchanged. However, that lower path for the unemployment rate is accompanied by higher price inflation than occurs when the real funds rate is held constant. Relative to the baseline projection, the economy experiences both higher unemployment and higher price inflation. All in all, these would be unpleasant and difficult circumstances for monetary policy.

I should hasten to add that these simulations can only sketch the broad forces that would be operating on the economy should productivity fall short of expectations. The model can not determine how long it would actually take private agents to learn about the slowdown and whether the process would be abrupt, as assumed in this scenario, or more gradual. The model also can not address the consequences of these developments for consumer and business confidence, which could play a central role in determining the depth and duration of any accompanying downturn in activity. Nor does it capture any special psychological effects on foreign investors that might arise should our recent stellar performance fade.

We certainly do not see such an outcome as likely. Indeed, there is a reasonable chance that the acceleration in productivity will continue rather than level out as in our forecast. But these exercises point to some issues that will warrant close scrutiny in the coming months and suggest the continuing importance of supply-side developments to your conduct of policy in the period ahead.

Karen will now continue our presentation.

MS. JOHNSON. The fundamental challenge we faced in putting together the foreign outlook this time was to assess the net effect of spillovers from the slowing of U.S. real output growth and the internal factors that had led to robust expansion abroad throughout much of last year. The transmission of U.S. developments to foreign economies importantly includes financial market linkages as well as traditional trade quantity and price effects.

Your first international chart reports developments in several industrial country financial markets. As you can see in the top left panel, the dollar continued to rise through much of the second half of last year in terms of the currencies of our major foreign industrial country trading partners (the black line) before partially retracing as depreciation against the euro (the blue line) more than offset a sharp upward move against the yen (the red line). The decline of the dollar against the euro seemed to be fueled by a series of data releases showing emerging weakness in U.S. economic growth. Euro appreciation appears to have halted, at least temporarily, around the turn of the year, as the Committee's action on January 3 bolstered confidence that the weakness in the U.S. economy will be limited and temporary. Also, some indicators suggested that the euro area might be experiencing a similar, if milder, fluctuation in growth. The dollar has moved up against the yen in response to further erosion of confidence in the prospects for successful structural reform and sustained recovery in Japan.

Interest rates (the middle left panel) have generally moved in line with these market perceptions since the June meeting. Short-term market rates have edged up in the euro area and Japan while moving down in the United States. Long-term interest rates have moved down in all three economies. Stock price developments as measured by three broad indexes are shown in the bottom left panel. After increasing the most in 1999, the Japanese Topix index has suffered the largest decline of the three, feeding concerns about the quality of bank balance sheets and adding to the general negative tone of financial developments in Japan, particularly over recent months.

The three panels on the right compare short-term interest rate futures at the time of the June FOMC meeting with the most recent data. For the euro area and Japan, these are three-month Eurocurrency futures market rates, with no adjustment for term premia. For the United States, these are the standard futures curves that blend near-term federal funds futures observations with Eurodollar futures rates, adjusted slightly for increasing term to maturity. As you can see, in all three cases the curves have shifted down since June. Market expectations are now for some near-term easing in euro rates. For the yen, the curve has flattened noticeably.

Your next chart shows similar indicators for key emerging market economies. Over the past seven months, the dollar has generally appreciated against the currencies of Asian emerging markets, shown on the top left, as market concerns have focused on the disappointing degree of progress in structural reform in some of these countries, on political stress in some, and most recently, on their dependence on high-tech industries and exports to the United States. Short-term domestic interest rates, the middle left panel, have eased in countries such as Korea where activity shows signs of decelerating, but have moved up in Indonesia as a consequence of ongoing political uncertainties and the inflationary pressures from rupiah depreciation. Dollar spreads for these countries generally remain low except for countries such as Indonesia that present special risks. Shown in the bottom left panel, stock prices in most Asian emerging market countries have been trending down since June but rebounded somewhat in January, as in Korea. In China, the prices for the B shares open to purchase by foreigners have moved up sharply.

For the Latin American countries shown on the right, exchange rates have been relatively stable, although the dollar has gradually appreciated against the Brazilian real since mid-2000. Although domestic Argentine interest rates (the middle right panel) rose sharply in November, as financial uncertainty became a major issue for that country, the domestic one-month rate has returned to its level at the end of June. Mexican and Brazilian rates did not spike with those in Argentina, and Brazilian rates have continued a downward trend that began in 1999. Brady bond spreads for these countries widened some at the time of the stress in Argentina, but are down on net over the seven months. Stock prices (the bottom left panel) have been volatile in all three countries and most recently have rebounded after declining over much of the second half of last year.

These financial indicators suggest that stock prices and to some extent exchange rates have been the major financial channels so far through which changed U.S. attitudes toward earnings prospects and willingness to bear risk have spread abroad. With expansion in activity generally softening, interest rates are easing; and some reduction in official rates is expected in many countries. However, emerging market spreads are not showing signs of generalized withdrawal from those markets by global investors.

Your next chart summarizes our outlook for the rest of the world and provides some detail for the developing countries. As is evident in the top left panel, we estimate that foreign growth (the blue bars) slowed significantly in the fourth quarter and brought average foreign growth for the second half of 2000 down to below 3-1/2 percent, annual rate, from the very rapid pace of the first half. Looking ahead over the forecast period, we expect some recovery from current diminished rates. On average, foreign expansion probably exceeded that in the United States in 2000, and we expect that to recur this year. The right-hand panel shows our projection that growth in the Asian developing countries (the blue bars) will remain the most robust of the three groups shown, albeit off the strong pace of 2000For the Asian emerging market economies that rely importantly on exports, trade links to the United States expose them to a direct adverse shock as U.S. growth slows. Moreover, for some, exports from the high-tech sector are of particular importance. With that industry showing considerable retrenchment, those economies are the most vulnerable. The available export data in the middle left panel show signs of a downturn, especially in Korea and Taiwan. As you can see on the right, we look for a substantial downshift from the rapid rates enjoyed in the first half of last year but a return to accelerating output at some point later this year as recovery in the United States boosts their exports and stabilizes financial conditions. We expect robust growth in China, where strong domestic demand is expected to take up some slack from reduced exports.

For Latin America, the need to finance large external deficits means that global financial conditions are a key link to developments in the United States and the rest of the world. The bottom left panel shows the public sector financing requirements faced by Argentina. The sizable jump in payments due in the first quarter of this year loomed over markets in November last year and fed growing concerns that a financing failure could erupt as the end of the year neared. Particularly large payments to private creditors (shown in red) and to those extending short-term debt (in blue) were bunched in the first part of this year. The financing package finalized earlier this month of additional IMF funds and substantial private sector contributions have, thus far, reassured markets that Argentina will be able to meet obligations in the first half of this year and that the burden going forward will be manageable. That optimistic view depends upon a favorable outcome for the fiscal deficit--the black portion of the bars--which in turn depends upon tax revenues and thus a return of growth. Our forecast, shown on the right, calls for growth in Argentina to recover but not to robust rates. We look for growth in Mexico, where the direct trade link to the U.S. economy is important, to slow further in the near term, but to turn up with the projected strengthening in U.S. activity later this year.

The major foreign industrial countries, reviewed on your next chart, to some extent are also open to contractionary impulses from the United States through trade and financial channels. This is particularly true for Canada. But we also had to consider to what extent these countries are large enough and diversified enough that domestic factors would sustain their growth and permit them to act as offsets in the global economy to the U.S. slowdown. In the top left panel, GDP leading indicators for the euro area and Canada (the black and blue lines) signaled further expansion during 1999 and into 2000. Both appear to have flattened or turned down slightly, in the case of Canada only very recently. In contrast, the indicator for Japan (the red line) has moved down sharply, reversing the gains it made last year.

Judging by the business sector surveys in the panel on the right, we see improved business confidence in both the euro area and Japan. For Canada, the most recent readings on business confidence do show some retrenchment, but that is from a quite high level in historical terms for that index.

In the middle left panel, employment data reflect the production gains that occurred through mid- to end-2000 and underlie our view that the household sectors in Canada and Europe are likely to be sources of strength going forward. In France in particular, some downward progress in the unemployment rate has come at a time of increasing labor force participation and thus substantial gains in total employment. In Japan, employment has fluctuated over the past two years with little net increase, consistent with our expectation that private consumption will remain weak.

The panel on the right shows our expectation of the stance of fiscal policy in these three areas through 2002. For Canada and the euro area--the green and red bars respectively--fiscal policy should be an even larger positive impulse to demand in 2001 than last year and is in sharp contrast to the fiscal restraint put in place in 1999. For Japan--the blue bars--we see additional fiscal restraint this year and next, contrary to expansion in 1999.

In the bottom left panel, headline inflation rates in Canada and the euro area rose over the past two years, boosted importantly by higher global oil prices. This development will be a factor in decisions by their respective central banks as to whether and by how much to reduce official rates. We look for the end of oil price increases and impending declines to contribute to a deceleration of headline consumer price indexes in these economies. In Japan, we project that deflation will continue, but at a diminishing rate over the forecast period.

As summarized on the right, we see subdued growth in the near term, with some strengthening on average later this year and in 2002. We look for Canada to decelerate the most sharply, as a consequence of its links to the United States, but also to rebound to strong growth next year, boosted by fiscal ease and momentum in domestic demand. Japan will grow, but only at a slow pace, as its financial sector problems and fiscal restraint continue to act as a drag on output growth.

Your next chart provides our outlook for oil prices and the dollar, as well as our export and import forecast. As in June, we based our projection for oil prices, shown in the top left panel, on current futures market quotes, which we believe square with softening global demand and limited production restraint from OPEC. Our projection for the real exchange value of the dollar in terms of a broad range of our trading partners, on the right, has the most recent run-up in the dollar's value gradually unwinding over the forecast period. With U.S. growth relatively anemic this year, we look for this decline to be more rapid in the near term than in later quarters.

Depreciation of the dollar should boost the rate of increase in prices for imported core goods, i.e., goods excluding computers, semiconductors, and oil, shown in the middle left panel. Those prices have been restrained by past dollar appreciation. Total import prices are projected to decline this year, reflecting the expected fall in global oil prices and further decreases in prices for computers and semiconductors, and then to be nearly unchanged next year.

Near-term weakness in global output growth is expected to limit growth in U.S. real exports of goods and services to sub-par rates in the first half of this year. But, as can be seen in the middle right panel, the strengthening in global activity expected later this year, combined with the effects of dollar depreciation, should contribute to a rebound in export growth such that for the year as a whole, export growth is moderate. Next year should see further acceleration of real exports.

Our projection for real imports is depicted in the bottom left panel. The more pronounced weakness in U.S. activity and the restraining effect of dollar depreciation on imports of real goods and services should result in import growth for this year that is less than that of exports. Stronger U.S. expansion in 2001 will boost import growth significantly. These forecasts are expressed as contributions to real GDP growth in the lower right. As you can see, over time we expect that exports will contribute an increased share to GDP growth while the negative contribution of imports also rises in magnitude. On balance, for this year and next, these two elements are about offsetting.

Dave will now complete our presentation.

MR. STOCKTON. Given the length of our presentation, you may be wondering whether this is a briefing or a hostage taking! [Laughter] So I'll try to be mercifully brief.

The final chart presents your projections for 2001. Since July, your forecasts for nominal and real GDP have been revised down, as has your forecast for PCE price inflation. The unemployment rate projected for the fourth quarter of this year has been adjusted up a bit. Relative to the staff projection, the central tendencies of your projections show stronger growth of real GDP and somewhat higher price inflation.

Mr. Chairman, that does complete our presentation.

CHAIRMAN GREENSPAN. Why didn't you show the July staff forecast so we could see how wrong that was?

MR. STOCKTON. It must have been just an oversight on my part! [Laughter]

CHAIRMAN GREENSPAN. You ran out of ink! That was a very interesting presentation and quite thorough. Questions for our colleagues?

MR. MOSKOW. I have a question about the projected inventory adjustment in this first quarter of 2001. It is very sharp, of course. I was just wondering if that's in line with historical experience or if you see some change in the structure of the economy that is causing it to be as sharp as you have projected in this quarter.

MR. SLIFMAN. It's probably on about the same scale relative to what's going on in terms of final demand and so on. It's a touch sharper and faster than historically; there's no doubt about that. And that is based on our judgment that there have been changes in the flexibility of businesses, both in terms of their labor inputs and their supply chain management systems, to adapt to unexpected changes in final demand that lead to these excess inventories. So, yes, we have factored in some change in the speed of the adjustment. It's not a massive change, but it has been informing our decisions.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Karen, you indicated that growth in Japan is going to remain low; you also noted that Japan is probably going to record its fourth consecutive year of consumer price deflation. That is such a poor outcome for Japan. Do you think this is likely to cause them to shift in some way their political approach to economic policy?

MS. JOHNSON. I've given up hope that anything will cause them to shift in some way their political approach! There is an increasingly intense debate going on yet again in Japan, sparked in part by the fact that the yen has moved so much over the last month or so. And officials of the Bank of Japan on the one hand and the Ministry of Finance on the other are somewhat at odds again, which I think is never a really constructive development. The source of my greatest pessimism is that the debate continues to be about the symptoms as opposed to the cause of their difficulties. And the remedies that are being proposed continue to be about the symptoms as opposed to the cause. They distract everybody concerned from really attacking the fundamental problem. Now, the Board's staff didn't get overly excited about the strength that appeared in Q1 last year and that appeared to be there even through the first half. So we were not overly disappointed by the outcome in the second half because that's how we saw the situation. But others did see the strength in the first half as the light at the end of the tunnel. And the Bank of Japan often pointed to that development as the light at the end of the tunnel. So it's possible that they will reach a point where they are in fact disappointed enough that something will happen. If the economy actually slips back into negative GDP growth that could do it. But at the moment I think the most likely outcome is that it won't actually slow that far, assuming that the U.S. problems don't become any greater than characterized by our baseline forecast. And therefore the political will to attack the real problems will gain no more energy than it has now.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. It's called a hedge.

MR. PARRY. It sounded rather pessimistic!

VICE CHAIRMAN MCDONOUGH. I think she's absolutely right on that.

CHAIRMAN GREENSPAN. They've lost their financial intermediation because they only have banking.

MR. PARRY. Right.

CHAIRMAN GREENSPAN. And the banking system with all the inputs of taxpayer money continues to deteriorate. If they can't respond to that, I don't know what is going to make them respond. It's just scary. President Jordan.

MR. JORDAN. Thank you. I'm following up on Mike Moskow's question about inventories. I want to tie it together with your assumptions and what you know about imports because they are big swing factors quarter to quarter, both compared to the December Greenbook projection versus now and also going forward. I can imagine a scenario where the overhang of inventories can be tied very closely to imported goods and so we would not expect to see much of an adjustment in inventories of domestically produced goods. So I'm wondering what you assume or what you know about that.

MR. SLIFMAN. Well, let me talk a little about what we know. We know that much of the inventory overhang initially began in domestically produced autos. We know the physical size of that overhang. So, that clearly is one sector where we could say that the excess inventory has been in domestically produced goods and where we can set aside the import issue. Another place where we have seen major imbalances beginning to develop and adjustments taking place is in construction materials and supplies, much of which is domestically produced although not entirely so. We obviously import some lumber and other construction supplies. But a great deal of that adjustment also--and we can tell that from industrial production--has been in domestic industries. Another area where we've seen overhangs is in materials. Those goods have a broader range of sources of supply. Clearly, some of the overhang in steel has been in imported steel. But we know also that a lot of it must have been domestically produced because we can see the production adjustments taking place; for example, this morning's data on the most recent weekly numbers for steel production indicated that it was down again this past week. So we know that a lot of it has been on the domestic side. I'll defer to Karen to speak about what we know from the import side.

MS. JOHNSON. I don't know a lot of detail since we only have trade data through November and we think some of the biggest shocks might have come after that. Imports of consumer goods and some industrial supplies actually held up in November but we're expecting them to fall off and join the crowd in the December data, which we will not get for another two-and-a-half weeks or so. To be honest, I don't know much more than that from the import data.

MR. JORDAN. The one sector you didn't mention is retail. Very large retail companies headquartered in Cincinnati and Columbus are telling us that 70 percent or more of their stock is imported and that the aisles are full of goods and no customers.

MS. JOHNSON. We do have some export data from other countries. It's clear that there have been sharp reactions and that some of this correction will take the form of a big drop in imports in December and January. That will be the transmission mechanism to some of these countries. Indeed, I think that's to be expected. We did see some declines in many categories of imports in the November data but not, for example, in consumer goods where I had expected to see it on the grounds that some of the first declines in final sales had come in that sector.

CHAIRMAN GREENSPAN. Do we have customs receipts for December yet?

MS. JOHNSON. Not that I'm aware. I don't think it's complete. I have not seen any.

CHAIRMAN GREENSPAN. I'm talking about the data that we previously used to try to estimate imports. It didn't work all that well.

MS. JOHNSON. No, it didn't work well. There were apples and oranges problems in trying to use those data and we had to be careful. Those data have not been routinely used for some time now.

CHAIRMAN GREENSPAN. The reason I raise the issue is that if something very dramatic was going on in December, even that terrible series is likely to show it.

MS. JOHNSON. Yes, that might show it. I will ask whether that series, having fallen into disrepute, nonetheless exists so that we might look at it.

MR. STOCKTON. President Jordan, I'd also note that our GDP forecast in some sense takes account of what we see happening to industrial production, which is domestic production. We saw such a sharp contraction in manufacturing activity in December--and in part just on the basis of what we know about autos--that we would expect another significant contraction in January. So we believe the domestic side production data are already leading us off to a very weak start to the quarter.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. You have forecast a fairly sharp recovery in the second half of the year after we get through with the inventory correction. I believe a lot of that hinges on your assumptions first, that production hangs in there and second, that that gets factored into people's permanent income expectations and their consumption behavior.

Do you have any trouble squaring that with these plummeting measures of consumer confidence? If people were really all that permanent income oriented, would consumer confidence be dropping the way it is?

MR. SLIFMAN. That's a good question. I can see how the confidence surveys--because the questions are asked in terms of one's expectations about what will happen to the economy--could be plunging and yet people's views with regard to their own personal situations and their individual longer-run income prospects could be well maintained. So implicit in our thinking, although we don't write it down this way explicitly, is the view that once we get past this inventory correction--and the layoff announcements slow down and so forth--people's expectations about the longer-run prospects for the economy will start to go back up again. We don't envision a severe confidence break that is long lasting. But that's clearly a risk to the forecast, and it's the reason we included an alternative simulation in Part I of the Greenbook with a greater near-term loss of confidence.

MR. STOCKTON. I'd say it's a serious concern because we have consumption slowing down rather dramatically but not declining, and one could look at those consumer surveys and certainly be more pessimistic. A couple of small factors held us back from being even more pessimistic about the near-term consumption outlook. One was that we were hearing from the auto makers that auto sales through the first 20 days of January, while suggesting no underlying improvement from the December figure once an allowance was made for a bump-up in fleet sales, were not continuing to fall off steeply. Another was the admittedly shaky weekly indicators that we see on consumer spending in the Mitsubishi index and the Johnson Red Book, which also were tending to tell something of a stabilization story, at least through the first half of January.

CHAIRMAN GREENSPAN. The figure out this morning was also supportive of that view.

MR. STOCKTON. Yes, it was still up 2-1/4 percent for the first three weeks of January over December. But I'd say there are very significant risks in this area. The charts we've shown you on consumer sentiment certainly are disturbing.

CHAIRMAN GREENSPAN. Do we have any evidence that consumer confidence indexes at the point when they are taken are a coincident or a leading indicator of consumer spending?

MR. STOCKTON. Well, the series that Larry has plotted in his charts, which is the Michigan expectations index, is actually a part of the leading indicators. So there is some evidence in that index that expectations tend to lead overall activity. In terms of the predictive content of the confidence measures for consumption, they tend to be more coincident than leading, but there's still a bit of predictive content for the month ahead.

CHAIRMAN GREENSPAN. One would certainly think that there'd be very little predictive content. When people get gloomy they don't go to the store. It's not as if they say, "Well, I won't go to the store tomorrow."

MR. SLIFMAN. Actually Jeff Fuhrer, who is here today, has done a lot of the staff's work on this. As we've noted many times before, the one series that seems to have a bit of predictive power is the one about unemployment expectations.

MR. STERN. Mr. Chairman, at our Bank we've run a lot of regressions over the years on these consumer sentiment surveys to see whether they're leading indicators. It has been our experience that it's very hard to get any predictive power out of them.

CHAIRMAN GREENSPAN. The way an economy comes back in this context, even with consumer attitudes deteriorating--providing that final demand is not falling very rapidly--is for production to move sufficiently below the level of consumption so that the rate of inventory liquidation is very large. The mere fact that there is a zero out there--that the inventory change could be zero somewhere down the road--requires that the rate of change must slow down. But what that means is that production then must rise to a point closer to the consumption level. And the turnaround in production creates increased income, so the dynamics don't require a change in psychology. It's the very arithmetic of the rate of liquidation and the gap between production and consumption that ultimately creates these V-shaped curves. I remember when we went through the 1975 recession that there was one thing I found really fascinating. At the bottom of the 1975 recession, the only forecast that had any credibility at all was for economic activity to keep going straight down. And it couldn't because the rate of inventory liquidation at that time was at its maximum, so the inventory situation stabilized and the whole economy eventually began to turn around. Historically that is a typical phenomenon. If what you have in your projection is right, namely a sharp first-quarter liquidation, that seems as a best estimate to be in process. President Poole.

MR. POOLE. I want to thank the staff for preparing the alternative simulation that has a monetary policy assumption that more or less approximates the readings from the fed funds futures market. Could you help me to understand that by explaining longer-term interest rates in that forecast relative to the baseline and how that feeds into certain sectors, especially housing and business fixed investment?

MR. STOCKTON. Sure. We don't call that the "full Poole" simulation. It's the "partial Poole" simulation, if I may put it that way. In that simulation the only additional financial market variable that we put into the model was the path for the funds rate taken from fed funds futures and Eurodollar futures. We allowed the model then to take that on board in terms of forecasting long-term interest rates. Those rates come down in that simulation and provide some stimulus to the interest-sensitive components of spending and in addition have a little effect on the exchange rate as well. So, in essence, this doesn't fully incorporate the market-based variables that you had suggested we at least take a look at. We plan to do that at some point. We're still working on it.

MR. POOLE. As I understand it, in the baseline forecast you have long-term interest rates remaining about where they are, which is the only rational forecast of long-term interest rates anyway. I say that because if you had an expected major change, you'd have big capital gains and losses that should not exist in the marketplace in a predicted fashion. So it may really be that what is sensible here is to leave long rates about where they are, which is what you've done in this alternative simulation, and just change the shorter rates.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. At our last board meeting in New York our directors were less than kind or fully complimentary about our forecasting skills, and other than trying to stick up for my colleagues I didn't have a very good answer for them.

Do we have a process around the System of asking--given that in our forecasts we all missed this sharp drop-off in the third and fourth quarters--what we have learned from the experience that would enhance our likelihood of at least getting it better the next time?

MR. STOCKTON. We don't have a formal process of a forecast-pooling comparison across the System. I do like to think that we are in touch with the staff at the Reserve Banks, especially at the Banks that prepare formal forecasts, and compare notes. Certainly the research program of the System is intended to address those issues, though with a considerable lag. So at this point I guess I'd have to say that we do so only very informally. Obviously, we are always engaged in the process of evaluating our forecast and trying to understand what went wrong. Hopefully we learn something from that but the increments are small.

MS. JOHNSON. I think we collectively wonder whether the new economy, or whatever elements in it prove durable, has changed the dynamic of the way things work. We are just too close to it at this point to judge, but we will keep asking that question.

CHAIRMAN GREENSPAN. I think part of the answer is the new economy. We can't explain it all in terms of the new economy because the model reflects the history of all previous periods. I can't speak for the models that we use formally either at the Board or at the Banks, but I can speak for my model, which I ran for many years and whose structure has very much in common with what we use here. What happens in retrospect is always the same. The problem with how we forecast is that we have a large quantity of historical data and we fit a model, which because of the limitations of our techniques requires that we use constant coefficients to capture the various relationships throughout the time period. What you will find is that unless you shock these models extraordinarily, you will never forecast a recession.

The reason is that the coefficients are constant throughout the period. And since the economy in general tends to gravitate toward equilibrium, the model--because it is picking up most of its observations from non-recession periods--is going to act in such a manner that if demand falls, interest rates immediately fall. That creates a resurgence in demand that prevents the recessionary forces from developing fully. We find anomalies, such as the fact that in the last three recessions we had oil shocks, which arguably were significant in affecting the subsequent recessions, although it's a small sample. Yet if we take the structure of the models, either today or back then, none of them would have forecasted a recession.

I think what is wrong with our models is the assumption that a single structure for both the expansion phase and the contraction phase is the appropriate way to capture the dynamics of the economy in the models. If we had enough recessions so that we had two separate systems of models we could argue that the coefficients in the recession models are different and that when we go from expansion to contraction the coefficients change and we get a sharp discontinuity. There is no way to forecast when that's going to happen except by luck. I'm not saying that there is no one who forecasts it. I'm basically saying that it is a random event. There are those who look back and say "I forecasted the recession," and I'm saying it was good luck because that's what it was.

VICE CHAIRMAN MCDONOUGH. I made the comment to my directors that certainly last September, October, and November I was talking a lot to people who said that the economy was going to hell. But every month of every quarter I'm talking to people who say that the economy is going to hell, so that doesn't help me a whole lot!

CHAIRMAN GREENSPAN. And that's the source of the argument that the stock market has forecast seven of the last three recessions. People's memories are remarkably selective in these sorts of periods. In any event, I would conclude that we don't have the capacity actually to forecast a recession. Moreover, I would argue that a recession evidently is increasingly becoming a different breed of animal than an expansion. Something different happens. Psychology is a crucial issue. When the economy is in an expansion phase, we have uncertainty but not fear. And people take actions; they do things. Put an economy in a psychology of fear, and nobody is interested in whether earnings growth is 5 percent or 15 percent. They just want out. You may remember, for example, back in 1998 when riskless off-the-run government securities were 20 basis points or so above the on-the-run issues, which meant that people were essentially saying, "I want to get out; I don't care whether it's good, bad, or indifferent, just get me out." They wanted to be liquid, meaning they wanted to be in cash. And that is not a movement along a simple linear continuum from certainty to the psychology of uncertainty, or even to considerable uncertainty but with a willingness to commit to a certain degree. It's almost a move from rational to irrational. So I would say to your directors that we may not have been able to forecast this, but neither have they. And it will be the same the next time. Write it on a slip of paper, so I don't have to repeat myself! I can say, "Here's what I said the last time." I don't know what we can do about it. I think all we can do is calculate the probabilities that that may happen. In other words, as we get closer to the point where the fabric of the economy is in danger of tearing, we can say that the chances that it will happen are greater, but that's the best we can do. We can only create what is essentially a probabilistic type of view. It is conceivable, and I suspect it is the case, that the new technologies have made everything move faster. But I don't think that has changed the fundamental nature of the difficult problem. I don't know whether I'm doing violence to what the staff would think about our models.

Further questions for our colleagues? If not, would somebody like to start the Committee discussion? President Parry.

MR. PARRY. Mr. Chairman, Twelfth District employment growth accelerated in the fourth quarter. The 4 percent annual rate of increase in employment in December pushed the growth of jobs since September to a bit over 3 percent. The expansion was broad-based. Five District states reported job growth rates of 3 percent or higher for the September-to-December period. That includes California, with a growth rate of 3-1/2 percent.

One notable cloud weighing on the minds and pocketbooks of consumers and businesses in the West is the energy situation. Natural gas prices, of course, are up for the nation as a whole. However, California continues to pay a premium for natural gas. In the California wholesale electric market, spot prices were still over $300 per megawatt hour last week. By comparison, the average prices for the Pennsylvania, New Jersey, Maryland interconnection were in the $20 to $40 range. Wholesale prices have remained high in California even though the state has stepped in as a major purchaser of power. With a large share of generation capacity off line, in order to keep the grid operating a notable amount of electricity usage was shed through reductions in power to interruptible customers in California and a very much smaller amount through rolling blackouts. The outages represented a little less than 1 percent of overall electricity consumption in the state for January. The disruptions likely have curtailed economic activity in California and have hurt profits, though I think we'll find the impact on output to be less than might be suggested by the 1 percent share of power shed through outages.

Looking toward this summer, by the end of June the state could add as much as 4 percent to generation capacity over that available last June. Under normal circumstances, that might be enough to meet the increase in demand for electricity, which has grown on average about 2-1/2 percent in recent years. However, conditions were very critical last summer. Moreover, the interruptible contracts are already tapped out in northern California and likely will be exhausted in the southern part of the state by summer, eliminating one of the tools for managing load on the grid.

Another area of uncertainty is the outlook for the supply of hydroelectric power from the Northwest this summer. California normally imports power from that region to meet demand during the hot summer months, but winter conditions in the Northwest have been dry. The bottom line seems to be that come this summer, California may not find itself in a much better position to meet the demand for electricity than it was last year.

I should mention that several legislative measures are being crafted right now in Sacramento. These are targeted at allowing the state to procure power and allowing the utilities to recover the net undercharges they have incurred. As currently envisioned, this legislation would require that rate fares cover the state's cost of purchasing electricity, which could mean higher utility rates. The draft legislation also would allow the utilities to recoup a large portion of the billions of dollars of undercharges incurred since June of last year, and that would be expected to raise their debt ratings. While the legislation won't do much to change the basic supply and demand situation in the near term, California's efforts to secure long-term electricity contracts could help reduce the state's reliance on spot markets.

Turning to the national economy--

CHAIRMAN GREENSPAN. May I interrupt you for just one second?

MR. PARRY. Yes.

CHAIRMAN GREENSPAN. Where is the 4 percent increase in capacity coming from--from bringing plants back off maintenance?

MR. PARRY. No, there are two new plants.

CHAIRMAN GREENSPAN. Two new plants will add 4 percent and you're not losing any other facilities in the process?

MR. PARRY. This is new capacity. In addition, some plants that are off line will be coming back because many of them are down temporarily for repairs and related reasons.

CHAIRMAN GREENSPAN. Thank you.

MR. PARRY. Turning to the national economy, the pace of economic activity appears to have slowed sharply in the current quarter, and output from the manufacturing sector has been especially hard hit. On the demand side, declining consumer sentiment and weakness in consumer spending, especially for durables, certainly are noteworthy. Fortunately, our action earlier this month seems to have bolstered confidence in financial markets a bit, as risk spreads have fallen and equity values have risen. An important element in these favorable reactions appears to be an expectation that we'll take further substantial action at this meeting and again later on.

We've lowered our forecast of real GDP growth in the current quarter by about 1-1/4 percentage points to a rate around 1 percent, although I certainly wouldn't rule out the weaker scenario in the Greenbook. In our forecast we have assumed that the federal funds rate is reduced by 50 basis points at this meeting and that the stock market and the value of the dollar are unchanged. Under those assumptions, our best estimate is that growth will pick up moderately through the rest of this year and average just over 2 percent for the year as a whole. Recent data on the CPI and ECI have been encouraging. Moreover, a slowdown in economic activity of the magnitude we're projecting is capable of providing the relief we've been looking for from the inflationary pressures inherent in today's tight labor markets. We expect core PCE prices to increase about 2 percent both this year and next year. Thank you.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you very much, Mr. Chairman. There's not a lot to say about the New England economy that I haven't said at the past several meetings. All the available data suggest that the regional economy continues to grow, albeit more slowly, with tight labor markets and prices that are rising more rapidly than elsewhere in the country. But the vast majority of these data are backward looking and do not capture the growing sense of regional uncertainty that we hear from our business contacts and that we see in the confidence indicators. Business and consumer confidence in fact turned sharply downward in the region in December, with the falloff concentrated largely in respondents' views about future conditions. However, the level of the indices remained in positive territory relative to earlier years.

These indicators are in harmony with quite a few of the anecdotal reports we've received. Our contacts in manufacturing, particularly suppliers to the auto industry, have seen sharp declines in activity. Production is returning to levels that would have been considered quite good five years ago, but it is sharply lower than at this time last year, and that downward adjustment is painful. Not all manufacturers have been negatively affected. Some firms reported double-digit gains in sales or orders, especially for computer-related, medical, and electric power equipment and for non-automotive transportation, though the double-digit pace was a bit below that reported earlier. Contacts also were concerned about rising input costs, especially energy prices and the high cost of financing for all but the most highly rated firms. Indeed, the steep decrease in business confidence in December in Massachusetts was attributed largely to tighter credit terms and other rising costs.

I have to say that at our meeting in December I was taken aback by how different New England seemed to be from other regions, particularly those in the center of the country. We've expended some effort during the interim period to determine whether New England really is different or whether it seems different because we're missing something. As I noted on the negative side, like the rest of the country, we do now see clear evidence of a manufacturing slowdown, especially in auto-related industries. High-end homes are not being built as frequently, although there are still quite a few under construction. Commercial real estate contacts in Boston suggest that the spring likely will show little in the way of new demand. And we have seen quite a softening of tax revenues in Massachusetts, particularly in November, which is the latest month for which data are available. But we see continuing areas of strength as well. Service and construction employment continues to grow and we hear reports that layoffs at dot-coms, in manufacturing, and elsewhere have made finding scarce labor easier. Moreover, we've had more than one report that focused on the threat to a slowing but still solid picture of an excess of fear, uncertainty, and doubt, as well as press coverage of recession possibilities. Thus, I tend to believe that the New England economy may be a bit stronger still than the nation as a whole, though the situation bears careful monitoring.

As I look at the national scene, I'm also struck by how fast relatively good conditions have deteriorated, even since mid-December. My thoughts are somewhat along the lines of what Bill McDonough was talking about before in terms of the fallibility of forecasts. It is true that downward spirals happen quickly. Witness the summer of 1990 as an example. Also, in many of the postwar recessions Fed policy continued to tighten even after the recession had begun, either because inflation was a particular problem or because recognition of the deteriorating state of the overall economy was slow to occur--or some combination of those factors.

So, I find myself asking three questions: Are we now in a recession? How long will the downturn--or whatever we call it--last? And what is the right policy response?

First, are we in a recession now? Our Bank's academic advisory council met last week, and Jim Stock and Ray Fair discussed their model-based answers to this question while Paul Samuelson and others based their views on insights gained from long experience. The consensus was that the probability that we are now in a recession is only about 20 to 30 percent. And council members were clearly of the view that our policy options are not greatly limited by the threat of inflation. They also shared a concern that the Fed may be placing too much emphasis on the economic impact of movements in stock markets. This assessment of a relatively low probability that a recession is currently under way is similar to the Greenbook's and our own forecast. We expect the first quarter of 2001 to be quite slow or even slightly negative, with a pickup after that. But I've also come to the view that whether or not we're in a recession right now is probably irrelevant. Last year at this time real GDP was growing at a pace of nearly 5 percent and private domestic final demand was rising at a rate of about 9 percent. If the Greenbook or we are at all right about the first quarter of 2001, real GDP growth will be zero or close to it, and growth in private domestic final demand will be about 1-1/2 percent. The average drop in GDP from peak to trough over the nine postwar recessions was only about 2-1/2 percentage points. So even if it turns out that we're not in a recession, it surely feels as if we are.

Second, how soon will the downturn be over? The Greenbook and our Bank's forecast suggest a slow first half and a pickup by the second half of the year. That would be a very short downturn, at least in postwar history, despite the fact that the peak-to-trough GDP drop would be fairly large. There are several reasons why this is the case and why this period may not be seen as a recession in the fullness of time. First, inflation is not a problem, so the amount of earlier policy tightening and its timing are not now working to greatly exacerbate and extend a slowdown. The fiscal situation is good both nationally and locally, so government spending can be a source of support. There is an inventory overhang but it seems small relative to earlier periods. Construction spending has not been overdone in this expansion and the banking sector remains a source of strength. Finally, major foreign economies--indeed the world in general--are in basically good shape, Japan notwithstanding, and can provide some support as well. Thus, while the slowdown has been sharp, there is reason to believe it will be short.

Third, what is the appropriate policy response? That's obviously a topic for discussion later, but I think a couple of observations are relevant now. I'm struck by the absence of upside risks in all of the Greenbook scenarios. Inflation rises only very modestly above 2 percent even with 100 basis points of extra policy easing, and unemployment jumps about 1 percentage point even in the strongest scenarios. With this range of possibilities, we should definitely move decisively now and be prepared to do so at the next meeting and maybe thereafter. But I remain a bit skeptical about all of these one-sided scenarios. For one thing, there's a small but increasing probability that fiscal impetus in the form of a tax cut will be larger and come sooner than we would have expected even quite recently. I don't debate that a very sharp slowdown seems to be in the works, but I believe there are negative consequences to thinking that the upside risk has totally vanished.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. In the Tenth District, economic growth has slowed further since our last meeting. Manufacturing and even some areas of homebuilding are experiencing outright declines in activity while other sectors generally are growing at a slower pace. As far as we can tell, for the District's economy as a whole growth is still positive and labor markets are still relatively tight but far less so than they were just a month ago. Moreover, with all the layoff announcements and talk about the slowing economy, consumers clearly are becoming uneasy. In our surveys of District contacts, businesses are showing more caution; they are waiting to see how the economy fares before they make any major decisions. Employment edged down last month and, in a departure from prior experience, last month's slowdown in job growth was due more to weakness in demand than to the lack of qualified labor that we've talked about in the past. A lot of the job losses in December were in manufacturing and construction, and these are also the sectors about which we have been hearing the most reports of declining activity lately. And we are hearing of extended layoffs at our local auto manufacturing plants. We've also been getting a steady flow of layoff announcements from other areas as well, which could limit job growth in the next couple of months. Retail sales have been sluggish. Despite heavy discounting, sales in December and early January were up only modestly over a year ago. Many of our contacts said unease about the economy was causing consumers to put off purchases, especially of big ticket items such as autos.

On a more positive note, some areas in commercial construction did hold steady. Work continues on a number of large projects, and commercial space is still in relatively short supply in most of our cities. A few contacts expressed concern about overbuilding in the retail market, but otherwise markets seem to be in general balance. Of course, energy activity remains a source of strength in our region, expanding as fast as firms can find equipment and workers. The District's rig count climbed further last month and is now at an 8-year high. In our District inflationary pressures remain relatively subdued and may even have eased slightly since our last meeting. Only a few of our business contacts reported above-normal wage increases, less than in the past months. Retail prices also appear to have edged down last month due to some heavy discounting. To be sure, some manufacturers have been hit hard by higher input costs, especially for natural gas. However, they are not finding it any easier to pass those costs on than before.

Let me turn to my comments on the national economy. I think recent events have confirmed our concern--or my concern at least--that the economy might slow more dramatically than desired or than thought likely only a month ago. Incoming data on economic activity suggest that the slowing continues and, like the Board's staff, I have marked down my outlook for near-term growth. But also like the staff, over the longer run I still remain confident about the underlying resilience of our economy.

Currently, though, we are in a cyclical slowdown. Weakness in the economy is likely to be broad-based. Consumption, especially durable goods expenditures, and business fixed investment continue to soften. Residential housing should tread water, I suspect, as low mortgage rates help to prop up demand. But inventory investment, as we've already noted, is softening noticeably. Incoming inflation data confirm a trend of moderate inflation pressures. Given that the economy is slowing, that energy price increases are showing some signs of unwinding, and that inflation expectations remain well anchored, inflation could ease some.

This projected economic weakness and moderate inflation outlook suggest to me that a 50 basis point reduction in the fed funds rate might be appropriate for us to consider. In my view, the current federal funds rate continues to represent a tight policy. The issue is not just whether we're in a recession but whether policy is tight, and I think it is. A 50 basis point reduction would take us toward a more neutral policy and would reflect prudence. I would suggest, as I have before, that it is in the early stages of a policy shift that we can be more aggressive in our rate actions. As we get to lower rate levels, we should be more cautious about any change or hold the rate constant to assess the situation. It is at times like the present that I think we can, and probably should, act a little more boldly.

Let me also take a minute to talk about the risks. As I've said, I think the longer-term outlook is for a pickup in economic growth as we get into the second half of the year. But there are important risks to this forecast. First, I think investment could decline further. Softer aggregate demand has a depressing effect on business fixed investment and future business spending. In light of weakening financial balance sheets and past spending levels, business fixed investment may be particularly vulnerable. Second, consumer debt service levels remain relatively high and asset values have softened. These factors and the low saving rate, along with declining consumer confidence and slower employment growth, could undermine consumer spending and the economy's growth. And finally, the foreign sector continues to embody some risks. With our large current account deficit and perhaps a slowing in economic growth elsewhere, I believe there are some risks in that area as well. These are the kinds of factors that we need to have in mind today as we consider our policy actions in the next part of this meeting. Thank you.

CHAIRMAN GREENSPAN. Thank you very much. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Economic activity in our Southeast region continues to slow in many sectors, although by most measures overall activity remains at a very high level. Retailers were generally disappointed by the flat holiday sales compared to last year, and many expressed concerns about the impact of widespread discounting on profits. A number of merchants tell us they are revising down their expenditure plans for 2001, and some--including Sears, Office Depot, and Walden Books--are scaling bank operations or closing stores because of weak sales. Continuing a trend observed for several months now, manufacturers across the District reported weaker conditions. Lumber and chemical firms continued to report sluggish activity. Paper mills are operating far below capacity or have gone to temporary shutdowns because of weak market conditions. Auto and light truck producers and their suppliers are cutting production but our relatively newer auto facilities in the South seem to be less affected than the older plants elsewhere.

There are some brighter spots in our region. It will come as no surprise that our energy extraction industry is strong. The drilling fleet is nearly fully utilized and day rates are beginning to reflect that. In New Orleans investment in new drilling rigs, production platforms, and wellhead equipment is increasing but oil field service companies report that a shortage of labor is slowing investment. And new military and private contracts continue to boost the shipbuilding industry in Louisiana and Mississippi. News from our hospitality sector remains mostly positive, although there has been some measurable falloff in business at the big casinos and in New Orleans. There is also some concern that as the travel season and convention dates get closer, we may see some cancellations and falloff in business.

Since our last meeting we've had a rash of announcements of worker layoffs and plant closings, many among technology and Internet companies. As best we can tell, so far those workers seem to be having no trouble quickly finding jobs with other employers at many of the old economy companies. With the exception of medical and energy costs, prices generally remain in check, and producers indicate they are still unable to raise prices because of stiff competition and now reduced demand.

At the national level, I, too, continue to be surprised by the extent of the adjustments that clearly are taking place and the speed with which they have come on us. Like the Greenbook, I find it difficult to judge with great certainty just where we are in that adjustment process and to forecast with any great confidence how long it will take. Everything we know about new inventory control systems would seem to suggest a relatively quick, although dramatic, inventory correction. And I still have considerable confidence that the great promise from technology across almost all industries and all sizes of companies argues for an early return to substantial investment spending. My staff's work continues to point toward a high probability of a good bounce back to a moderate pace of growth later this year.

Having said that, I still see a number of downside risks, including the uncertain petroleum and energy situation--punctuated by the problems in California which my contacts in that industry say could show up in other states. While we probably can't do anything about the prospects for the first quarter, the rebound in the second half of the year predicted by nearly everyone is contingent upon further declines in the funds rate in the near term. With the real rate still higher than seems appropriate and with a very favorable inflation environment, I think we can and should move decisively and quickly. There would seem to be little value in keeping people guessing and adding to financial market uncertainty. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. It seems to me that the question we're facing at this meeting is whether the economy in 2001 will behave more like the economy we had in 1995 or more like the one we had in 1990. In 1995 growth slowed substantially after the Fed had tightened policy over the previous year but there was no recession. In 1990 the economy was growing very slowly and then went into recession by the middle of the year.

Most incoming regional information seems to be more consistent with the 1995 scenario. We are seeing a significant slowdown in our regional economy. We don't seem to be slipping into a recession, at least not yet. Currently Pennsylvania is doing worse than New Jersey and Delaware, and that was the case in 1995. Manufacturing in our District is a key area of weakness and reports from manufacturers are more consistent with the recession scenario. Many of the component measures in our latest business outlook survey of manufacturing firms--including the indexes of general activity, new orders, and shipments--registered their second largest decline in the survey's 32-year history. Reports from these firms that we received after the Fed's easing move in early January were worse than those received before the Fed's action, [laughter] confirming the need for action. But those later reports were somewhat more optimistic about activity six months ahead, presumably because we did act. The decline in manufacturing in the District has been widespread. The slowdown in the region's durable manufacturing activity has been evident over a period of several months. In contrast, nondurable manufacturing activity declined sharply only recently.

Several other sectors of the District do not appear to be as weak; they have shown slower growth, but not the sharp drop evident in manufacturing. Construction contracting in our region has slipped in recent months but office and industrial vacancy rates continue to be quite low. And quite a few projects are under way or scheduled. Our real estate contacts generally indicate that the real estate sector is not overbuilt. Housing permits are holding up pretty well, particularly for single-family housing. Contacts in the industry suggest that housing is likely to be fairly steady in the District this year. And banks report that their lending, including refinancing activity, is up. Although the unemployment rate in the District has edged up slightly, particularly in Pennsylvania, labor markets continue to be quite tight in many areas.

From talking to business people in the District I don't get the sense that they feel they have big inventories that have to be worked off. Many I've contacted recently have made comments like "things are pretty good." Outside of manufacturing, regional businesses do not convey a sense that their business or the economy is going into the tank; in fact, quite the contrary. On the price front, retailers report that wage and benefit increases are not accelerating. And in our regional surveys of retailers and manufacturers, price pressures seem less evident than before.

Turning to the national perspective, incoming data tend to confirm the views expressed here that the economy has slowed significantly, particularly in the manufacturing sector. As of now, the economy is softer than I had expected it to be just two months ago. We may indeed get a negative quarter of output growth but I don't see signs of a credit crunch, which we had in 1990-1991, that would impede a rebound in economic activity. And absent something like an adverse oil price shock that could tip the economy into recession, I don't see such broad-based weakness across all sectors of the economy that I am led to conclude that a recession is imminent.

Accordingly, our forecast for real GDP growth and unemployment through this year is not quite as pessimistic as the Board staff's. We think the slowdown in the first half of the year will be somewhat smaller and less lengthy; the adjustment portrayed in the charts is a bit more dramatic than we see. Part of the difference involves the size of the inventory correction in the two forecasts. This is in turn related to how quickly consumer and business investment spending return to higher growth paths. Since there are wide confidence intervals around these forecasts, however, I cannot ignore the possibility that the staff's forecast will be correct. And given the deterioration in consumer and business sentiment that we have seen so far, certainly there is reason to continue to be concerned about the downside risks to the economy. That is, the range of outcomes for economic growth this year seems to me to be skewed toward less growth, while the outcome for inflation is of less concern. So I worry that if my forecast is wrong, it's likely to be because we overestimated economic growth. In sum, I think it's important for the Committee to insure that the year 2001 turns out to be more like 1995 than 1990. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I will have been on this Committee 10 years tomorrow and I've never seen a Beige Book as negative as the current one, and that's true both for the Eleventh District and for the overall summary for the nation. The economist at the Dallas Fed who manages our Beige Book contacts confirms that this was the most pessimistic they have been in her more than 10 years' experience, and that includes the period of the last recession. Many of our contacts spoke of current and prospective deflation in their industries. Various segments of the economy are, to use Beige Book language, either softening, decelerating, cooling, slowing, weakening, declining, falling, or dropping. In manufacturing, steel producers are “in difficulty,” auto assembly plants are “shutting down,” and computer production is "declining." About the only thing rising is the level of inventories. And to quote a line from the national summary: “Layoffs in a wide variety of industries were announced in most Districts.” Under current law, layoffs by large employers must be announced at least 60 days before they take place, so we should not be lulled by the current low rate of unemployment. And when the layoffs begin in earnest, consumer confidence and consumer spending could plunge.

Texas does have some good news in continued high oil and gas prices. I doubt that the rest of the country will benefit too much from that. [Laughter] Texas energy activity is increasingly concentrated in the Houston area. That is reflected in the National Association of Purchasing Managers' Manufacturing Index for the Houston/Gulf Coast area, which actually increased from 58.8 to 61.7 in December. By contrast, in the Dallas/Fort Worth area, where manufacturing is increasingly dominated by high-tech manufacturing, the index fell in December from 53.5 to 44.7--nine points in one month. At the national level, the index fell by a similar amount over a slightly longer time period. Declining manufacturing activity nationwide was confirmed by the index of industrial production, which has fallen by .1, .3, and .6 over the last three months. The contraction has been concentrated in investment spending so far, but rapidly sinking consumer confidence doesn’t augur well for consumer spending going forward. People are watching too much CNBC and are being demoralized by the constant drumbeat of downward revisions and missed earnings estimates. The blues are contagious.

Our new and improved economy seemed able earlier to survive Fed tightening, rising energy prices, and a swooning NASDAQ stock market, but dimpled, pregnant, and hanging chads were apparently too much for it! And that was before the lights went out in California. To paraphrase Rudyard Kipling, "If you can keep your head when all about you are losing theirs and blaming it on you, you don't understand the gravity of the situation." [Laughter] Despite all this, my projections for this year are relatively optimistic. That's because they are based on my assumption of another bold and immediate policy easing at this meeting, followed up as necessary both early and often. For reasons I'll come back to later, I believe this Committee should front-load its policy moves as much as possible. On the question of whether we are in or about to be in a recession, it seems to me that we may be relying on an outdated rule of thumb. The standard of two quarters of negative GPD growth has been used to define a recession during a time period when conventional wisdom presumed that potential output growth was around 2-1/2 percent or perhaps a tad higher. Given the rise in structural productivity growth and the increase in labor force growth stemming from increased immigration, we now believe that potential output growth is somewhat above 4 percent. The Greenbook has GDP growth for three quarters, from the fourth quarter of 2000 through the second quarter of this year, slowing on average by more than 2-1/2 percentage points from the new higher rate of potential. In the old days a drop that large would have put us into negative territory. Maybe that's why this air pocket we've hit already feels to many people like a crash landing or certainly the early stages of recession.

Most of you probably think that I sound too much like Chicken Little. You may be right. The sky may not be falling, but I think that we can all agree with the Chairman that it has been measurably weakened. Certainly the downside risks--

CHAIRMAN GREENSPAN. The sky has been "measurably weakened"? [Laughter]

MR. MCTEER. I was referring to that cartoon of a few years ago. It had a chicken with your head on it and it came off!

CHAIRMAN GREENSPAN. I understand!

MR. MCTEER. Certainly the downside risks have increased, perhaps even since January 3rd, particularly on the international front. In recent weeks we've seen signs of slower growth abroad, with leading indicators in many of our key trading partners moving in the wrong direction. This could be the first time in a long time that all of the world's major economies are slowing sharply at the same time.

At the beginning of a new monetary policy cycle, which is where we are now, the need for decisive action is usually clearer and stronger than it will be later in the cycle. Further ease is clearly needed now. We have little to lose in making it substantial. Later on, several months from now, the risks of one easing too many will be much higher. One reason for front-loading the easing is to get the additional stimulus into the pipeline as soon as possible while it is clearly needed. Another corollary reason to do it now is to reduce the need for a large move later when it might prove to be the one move too many. If the last move in this cycle turns out to be a mistake, let it be a small mistake. A third reason for front-loading policy was recently illustrated by one of my colleagues. He is furnishing a house and was about to do some heavy-duty shopping for furniture. But a prominent furniture store in Dallas announced in the middle of January that it will be having a big sale in February, so my colleague is now waiting on the sidelines and saving his money for the sale. A likely tax cut in the next few months may already have some potential spenders on the sidelines. The near-term damage will only be magnified if we also give people a reason to wait for the monetary policy easing that they and we expect will be necessary eventually. Another ½ point cut at this meeting would go far toward nipping in the bud our recession or banana or whatever we want to call it.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Overall, the District economy has evolved recently largely as has the national economy, as best I can judge. Consumer spending was lackluster both during the holiday season and since then, and sales promotions and discounting have been intense. Employment gains have decreased and labor market conditions appear to be a little less tight than they were earlier, although I don't want to exaggerate that. In the services sector today in our District it seems easier to get a job than to get service! [Laughter] The manufacturing sector is clearly in difficulty. The mining sector is weak and natural resources for the most part--outside of the energy sector--are struggling. And anecdotes, mostly coming from our bankers, suggest that higher energy prices are greatly stressing both households and businesses. The bankers expect delinquency rates to rise. They are seeing some plant shutdowns as a consequence of the higher energy prices and seem to expect more of that.

Not all is negative; there are a couple of regional bright spots. Maybe the most obvious and distinct one is commercial construction activity, which is quite strong. Residential construction activity also has held up well.

As far as the national economy is concerned, I'm in general agreement with the contour of the Greenbook forecast. But I seriously doubt that we will avert a recession. I say that for several reasons. One is my sense of the inventory situation. The other is my experience with the type of consumer spending forecast in the Greenbook. As I look back over the data for the postwar period, we've seen consumer spending as soft as depicted in the staff's outlook for the next four quarters only in recessionary periods. Of course, consumer spending is only part of the economy and historical patterns aren't always repeated, but that pattern of consumption expenditures really raises a flag in my mind. I recall that back in 1990 we at the Minneapolis Fed had prepared internally a forecast with a very similar pattern of consumer spending--a type of pattern we typically see in recessions, although we weren't forecasting a recession. One of our economists observed that if we got that path of consumer spending, we were going to get a recession. He turned out to be right. So it seems to me that the probability of recession at this point is uncomfortably high.

CHAIRMAN GREENSPAN. On that pleasant note, why don't we break for coffee and come back? There's only one direction we can go from there! [Laughter]

[Coffee break]

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Unfortunately, I'm not much more optimistic than Gary Stern, who spoke before the break.

As you would expect, reports from contacts in the Seventh District indicate even further slowing in activity, particularly in our manufacturing sector. In fact the news last week from our directors as well as from our other contacts was downright gloomy. I'm going to mention several new pieces of information; all are gloomy.

The weakness in manufacturing has been widespread. Indeed, the Chicago Purchasing Managers' Survey results for January that will be released tomorrow show declines in the construction components of the composite index to levels not seen since late 1982. The Chicago PMI is down to 40.2 percent. Production cutbacks in the auto industry are a major reason for the further weakening in the region's manufacturing sector in recent months. Based on reports from our contacts at the Big Three, first-quarter assembly schedules have been scaled back even more than is indicated in the Greenbook. And one of our directors with very close ties to the auto industry indicated that the whisper estimates for first-quarter production are even lower. Estimates of sales for January by Big Three analysts center around 16 million units, up from sales of 15.3 million in December. The January increase was due to factors such as fleet sales, better weather than in December, and higher incentives offered by dealers who are concerned about the drop in consumer confidence. These factors, of course, may be temporary. Dealers report that they have not seen a sharp decline like the total for the last two months since the early 1990s.

Conditions in the domestic steel industry are bleak, with slowing demand now exacerbating the impact of import competition and low steel prices contributing to numerous bankruptcy filings. Some District retailers report a modest sales rebound in January stemming from heavy discounting and promotional activities which, of course, will reduce their profit margins. One piece of good news involves the construction industry. Our assessment of residential and nonresidential construction is that there has not been significant overbuilding, at least so far. But for the first time in many years, tax revenues in District states are coming in below budget. The weakness from the third quarter to the fourth quarter of 2000 in all sources of state revenues, notably sales tax collections, was evident across all of our five states, especially Michigan.

In part reflecting the slowing in the region's economy, our labor markets show further signs of easing. The unemployment rate for the five District states moved up to 3.8 percent in December; it had been 3.3 percent in October. Contacts report less difficulty finding workers. And Manpower's latest survey results, which will not be released to the public for quite some time--not until February 26th--are going to show a very sharp reduction of 20 to 25 percent in hiring plans for the second quarter of this year. That's the biggest drop in five years, with the decline sharpest for the Midwest. As you may recall, this measure had been breaking new records on the up side every quarter for the last several years. Wage pressures seem to be easing as well. One of our directors from organized labor noted that recent contracts typically include wage increases of around 3 percent, down from the previous 5 to 8 percent range.

Turning to the national outlook, the economy has slowed rapidly and dramatically, much more than expected. Despite our weaker outlook for auto production, our current assessment of real GDP growth for 2001 is not quite as pessimistic as that in the Greenbook. We expect this quarter's growth to be slightly positive and overall growth for the year to be about 2-1/2 percent. Inventories explain much of the difference in the two forecasts for the first half of the year. We expect a slightly smaller inventory correction, spread out over this quarter and next, which is more in line with historical experience. For the year as a whole, the main reason for the difference in forecasts is that we expect more monetary policy easing than does the Greenbook, and that easing raises growth in the second half of the year.

In assessing economic conditions and inflationary pressures, our staff has been computing a monthly index of national economic conditions. This single index summarizes 85 data series on economic activity and was adapted from research done by Jim Stock and Mark Watson. With data available through December, the current reading of our index is minus 0.56. Historically, an index reading between minus 0.7 and minus 1.0 percent is associated with a high probability of the onset of a recession. Of course, this is not a definitive economic indicator, but it is suggestive. And this reading seems quite consistent with my view of the situation, which is that the economy is not currently in a recession, nor inevitably heading into one, but we could be close.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, as elsewhere in the country, economic activity in our District has softened somewhat. It softened quite markedly in December and apparently somewhat further in January, although we have a few hints of some leveling out in District activity in January. And I gather that Baltimore's economy has been looking stronger over the last couple of days, especially for the bars and the T-shirts shops! [Laughter] Otherwise, though, our contacts in the retail sector reported weak sales in both months. One of our directors is the recently retired CEO of the Hecht's department store chain in this region. He indicated that December was the roughest month for retailers in a decade, though he did say that sales were a little better than expected in January. I'm not sure what was expected, but in general the retail picture is weak, with perhaps some leveling out this month.

As elsewhere, manufacturing activity in our region--and manufacturing is a big part of the economic base in the southern part of our District--is very weak, with paper, furniture, and textiles especially hard hit. Of course, the textile industry is in the midst of a longer-term structural shift, but the current situation certainly isn't helping. There has been an increasing incidence of layoffs at factories and laid-off workers are having more difficulty finding substitute employment now than they were earlier. One modestly encouraging report from the manufacturing sector, at least in our region, is that the rate of decline seems to be diminishing. It was less pronounced in January than in December, which I guess holds out a bit of hope that business firms are making some progress on the inventory correction and might be a little further down that road than is generally believed at this point.

Labor markets overall remain tight; although not as tight as they were, they're still remarkably tight. A long time friend and business contact asked me the other day if I remembered the jobless recovery of the early part of the decade. I said I did, and he said, "Well, we're now in a full employment recession!" [Laughter]

With respect to the national economy, it's hard not to be impressed by the weak data that have come in since our December meeting. We have a slew of discouraging reports from the manufacturing sector. The index of three-month changes in industrial production, for example, hit its lowest level since December 1991. That suggests weakness that extends well beyond the motor vehicle industry. And, as other people have noted, household and business confidence has clearly weakened dramatically. It's always difficult to understand a sharp deterioration in confidence such as this. I think part of it may be that whenever the Fed acts to restrain the economy after a period of unsustainably strong growth, the public and the markets see an actual decline in economic activity. There's always a lot of nervousness until people get some sense that it's beginning to bottom out. And I don't think we're there yet.

With inflation apparently well contained, at least for now, I think we can reasonably ease further at this meeting without materially endangering our longer-term credibility. I do believe that we should exercise some caution in doing this, so I would endorse the point that you made, Cathy. And I would add one other point, which is that virtually all postwar recessions in the United States have been preceded by a sharp deceleration in money growth, occasioned by ongoing tightening of monetary policy, and that's not the situation right now.

I'd like to make one final comment, Mr. Chairman. Let me preface this by saying that I'm not trying to put inflation targeting back on the table; I lost that one last month and I recognize that. But I do worry that we may lose something with the demise of our explicit consideration of the money supply targets at our January and July meetings each year. That was always a separate agenda item. And while I don't think very many of us were giving a lot of weight to the money supply targets per se, it was a nice occasion to think strategically about monetary policy issues as opposed to the shorter-run tactical issues on which we normally focus. Personally, I found these discussions very useful as the context for the shorter-term tactical issues we had to deal with in the intervening meetings. And hopefully, Mr. Chairman, they were helpful to you in conveying the sense of the Committee's views in your semiannual testimony. I don't know what is going to happen tomorrow, but I would recommend that we consider reinstituting a separate agenda item involving some discussion of the longer-term strategic issues, with maybe some longer-term simulations besides the ones in the Bluebook. Thank you.

CHAIRMAN GREENSPAN. I don't know about the rest of our colleagues, but I get a chart on M2 and M3 every week.

VICE CHAIRMAN MCDONOUGH. So do I.

CHAIRMAN GREENSPAN. So it's not as though we're not monitoring it.

MR. BROADDUS. I really wasn't thinking about the aggregates so much, although certainly if we want to discuss money supply trends, that's fine with me. I'm just talking about taking a longer-term look at where we're headed and maybe reaffirming our objectives. I have in mind the kinds of discussions we had a few years ago when we were looking at whether or not we should approach reducing inflation in an opportunistic way or in a more deliberate way. I hope we leave a place on our agenda for that kind of discussion.

CHAIRMAN GREENSPAN. I think we tend to do that in any event. Take this morning's discussion, for example. It was an add-on to a rather long agenda. We're going to have short agendas at some point and we can put in an agenda item on strategic and other related issues at that time. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Thank you, Mr. Chairman. The Second District trailed the national economy in strengthening in the early part of the 1990s and then grew a bit more slowly thereafter. Apparently justice prevails in the end because I think we have the most optimistic District commentary so far today. The Second

District's economy has shown few signs of slowing in recent weeks and there is little indication of any pickup in inflationary pressures.

In the fourth quarter, private sector job growth decelerated somewhat in New Jersey to a 0.9 percent annual pace but remained strong in New York State at 1.8 percent. Weakness in manufacturing employment, of course, is a lesser problem for us because so much of manufacturing has long since left the District, but the bit of weakness we saw in that area was offset by strong job gains in construction, business services, and finance. As a result, unemployment rates were little changed. Retail sales were reported to be steady in early January, and steep markdowns of clearance merchandise, especially clothing, helped to keep inventories at satisfactory levels. Construction and real estate remain generally strong with only very scattered signs of softening, mainly in the Manhattan office market, which is still very, very tight but slackened somewhat in the fourth quarter. Availability rates have edged up. Rents have stopped rising but certainly have not started to fall. And subleasing activity has risen sharply, largely in space given up by dot-com companies that no longer exist. Regional purchasing managers reported steady to stronger business conditions in December as well as increasingly widespread input price pressures. And finally, local banks reported weakening loan demand, some further tightening in credit standards, and an uptick in consumer delinquency rates.

Against that background one might think--if one attended the same sort of parties that many attend on the upper West Side, the upper East Side, lower Manhattan, Staten Island, or elsewhere--that everybody seems optimistic. Of course they are not. They are deep in the doldrums and predicting that the end of the world is very close upon us. That leads me to believe, even though we have essentially the same forecast for the economy as in the Greenbook, that we are experiencing an inventory adjustment. We expect it to be quick, deep, but rather short, ending by the end of the second quarter. Our forecast for the first quarter is not quite as weak as the Greenbook's, but we certainly agree that the latter is a definite possibility. We have the same view as the Greenbook that the economy will snap back because of our belief in the persistence of the ongoing productivity improvement. However, I do think that business confidence is a very considerable downside risk. I'm much more concerned about that than I am about consumer confidence because I agree that consumer confidence tends to be a coincident indicator by and large. Because of the real concern that I have about business confidence, a concern I have heard reflected around the table, it does seem to me that a definite additional easing action by the Committee continues to be in order.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. I guess it's not surprising that the Twelfth and the Second Districts are doing well, in contrast to our region. We ought to be viewing it as payback time for the prosperity we enjoyed in the '90s. It probably will take long memories to remember how good it once was.

I didn't really need to see the Michigan Survey of Consumer Sentiment or the Conference Board's survey results to know that consumer sentiment had deteriorated. That's because of an experience I had yesterday morning when I got to the office. Before I went to a briefing with our economists, my secretary thought I ought to see her heating bill for the month of December and that of her elderly aunt. The numbers were really shocking. November and December were the coldest months on record. Combine that with the rise in energy prices and it's clear that people are taking a huge hit. So it's not surprising that confidence is down, though we don't really have an answer to Governor Gramlich's question about whether we are seeing a permanent income kind of effect. We'll have to wait until it warms up and see how it thaws out!

Mike Moskow referred to the steel industry as bleak. That's not what my contacts are saying. spent his career in the steel industry said steel is "an unprecedented disaster," which is worse than bleak. He said we should expect to see more bankruptcies of integrated steel companies, further consolidation, some plant closings, and sustained reductions in employment in the steel industry. I'll come back in a minute to some structural issues about large manufacturing companies more generally.

A large producer of plastics said that business has fallen through the floor and is still falling. He's found another floor! After more than two years of continuous overtime, auto assembly and parts plants have no overtime and have been announcing layoffs that they hope will be only temporary. But it now looks from the latest news in the last couple of days that there will be some permanent plant closings in our District.

Possibly as the result of the weakness in manufacturing, retailers reported that for the first time in several years they had no trouble at all hiring the seasonal workers that they needed. As a reflection of how much weaker the region is than the national figures suggest, unemployment claims in December rose from 57,000 a year ago to over 90,000 this year, a 65 percent increase. My guess is that our increase in unemployment is going to be temporary. As soon as the benefits run out, many people leave the workforce, or they head west or south.

Putting a positive spin on all this, one director said that the dramatic loosening of the region's labor markets means that firms will be giving smaller raises than they had earlier budgeted for this year. And no one is offering retention or recruitment bonuses, which were a big issue with everyone last year. Another director said his firm is seeing more applications than openings for the first time in two years. As of last week, auto suppliers said they now expect no pickup in orders before the fourth quarter. And we were told that just since the first of January there has been a noticeable decline in orders from both Mexico and Canada.

A retailer said the drop in sales in December was so sudden that he at first suspected that their computers were broken. He claims that the shake-out in retail will be worse this year than in the 1990-91 recession. Every division of Limited stores had declining year-over-year same-store sales. At Hallmark stores sales were down 6 percent year-over-year.

After complaining most of the last year about the difficulty of attracting deposits, our bankers reported strong deposit growth in December and early January, which is consistent with the national figures we're seeing. They also say that mortgage refinancing is booming again; and home equity loan demand is very strong, which might not be a good sign. One banker said it is common for homeowners to take out additional equity when they refinance, reinforcing what was suggested in some of the materials we were given. Other comments by bankers included a rising trend of late payments and a rapid and serious deterioration in their credit card debt.

Turning to more general remarks about the region, I think we are now going to see what I view as a longer-term decline in the old economy industries that had been the strength in our part of the country over recent years. I now believe that the right way to think about what we saw in the last few years in the behavior of these companies is that the healthy glow of a fever was masking a serious fundamental illness. They didn't deal with their problems and it's going to be very difficult for them to deal with them now, as we're seeing in what the steel companies and their workers are asking for.

When I talk to civic and government leaders in the region, they remind me of somebody who runs a retail establishment and says that the customers aren't coming, the products aren't selling, and our competition is killing us, so I guess we'll have to raise our prices. I say that because these politicians want to tax anything that moves in order to subsidize those parts of the economy that are not moving. They are scrambling to find any and every way to raise taxes, mainly because population and employment are declining and the revenue base is now starting to decline. So suddenly they're desperate for more revenue.

Let me turn to the national economy. With regard to the remarks about how difficult it is to forecast recessions--and I certainly agree with that--I'd note that that is true also of forecasting recoveries. When the economy turns, it is surprising how rapidly and vigorously it sometimes turns. As we have seen in the past, recessions often have been associated with some unforeseen event, whether it was the Gulf War of 1990 or the near recession in the aftermath of the Long-Term Capital Management debacle--a development that didn't turn into a recession. But we are sometimes just as surprised by the vigor of an upturn, most recently in 1999. If we go back to the fall of 1998, in the forecasts that we were looking at and the Blue Chip forecasts as well, nobody foresaw the vigor of '99. So the surprises can come from both directions.

Underneath most forecasting exercises there's an inherent philosophy about the nature of the market economy. A lot of models historically have been based on what I think of as older ideas about economic activity. They tend to reflect the view that there is a natural tendency for the economy to stagnate, for a decaying process to take place as the old stimulus wears off in the absence of new stimulus. The opposite view, of course, is that the market economy is inherently resilient, that it tends to expand except when it gets knocked down for some reason or other. And as we know, over time it has been knocked down for a whole host of reasons--sometimes even because of perverse economic policies, monetary or fiscal. I believe that one aspect of our job is to do no harm--not to be a part of the problem. And whether or not we need to be a part of the solution, in terms of the stimulus, is a different way of thinking about things.

Like Tom Hoenig, given the current circumstances, I think our policy recently has been more restrictive than is appropriate. And I come to that view with some difficulty. I read the yield curve and other things as telling me that, but I don't read the money numbers as telling me that. So I put a lot of weight on the staff's explanations that mortgage refinancing or this and that are affecting the money numbers and that by May or June M2 growth is going to be down to 1 or 2 percent. If that doesn't turn out to be true, I'm going to change my assessment about how restrictive policy is.

I agree with Bob McTeer on the general idea of front-loading policy changes. My view on this is symmetrical; I mean it in both directions. At times I'm just as impatient to move toward restraint as to move toward ease. But I recognize, given the external pressures and the dynamics, that it's always a lot easier to front-load on the easing side than on the other side. While I would support the "early" part of Bob's suggestion, I do not agree with the "often" part. I would front-load--move early--and then pause.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. At this point it's unclear to me whether the present pause in economic growth will be a relatively short inventory correction or a more serious downturn. But there's plenty of evidence that real output growth has stalled, and even with the cut we made in the funds rate earlier this month, the rate still seems much too high in my view for today's conditions. I had prepared a long statement to persuade you all of this. At this point I think reading that would be piling on, so let me just tick off the points and try to get through them fairly quickly.

One piece of evidence is that in the face of rather pervasive economic weakness the real funds rate is currently higher than it has been for most of the last seven years. A second point relates to the Greenbook baseline forecast. Last time, as I saw the unemployment rate in the baseline forecast rising to 5 percent, I said that I didn't think that did anything for us in terms of inflation credibility and that we should act to cut off some of the rise in unemployment. Well, if I didn't like 5 percent, I certainly don't like 5-1/2 percent! A third point is the Taylor Rule. Generally since I've been here, the Taylor Rule--because of the implicit output gap assumption in it--has been telling us to raise the funds rate. Now even the Taylor Rule has turned around and is telling us to lower the funds rate.

More on the current numbers front: Last time we noticed several sources of weakness--the stock market, foreign real growth, auto sales, industrial production, diffusion indices, consumer confidence, and even the beginnings of a slowdown in high-tech investment spending. This time all of those sources of weakness have been confirmed and we have several new developments. One is the very negative tone of the Beige Book, which Bob McTeer mentioned earlier. Another is the downward revision in the Blue Chip forecast; the average anticipated real growth for 2001 is down from 3.1 percent in November to 2.6 percent in December. I don't take that forecast literally because I think most of us would be delighted if we got 2.6 percent real growth this year. But for a stodgy index that represents an average of 50 forecasters to be revised that much in one month seems rather remarkable to me. The same is true of the Goldman Sachs forecasting model, in which the predicted probability of a recession went from 35 percent in November to 50 percent in December--again, I think a remarkable change in one month. The staff has cut its forecast for consumption, investment, and final demand very sharply. The high frequency chart that Larry presented earlier showed--and this is an old Fed term--"disquieting similarities" to an earlier period of recession. One could go on and on, but I think all of these indications of a slowdown on top of the earlier softness make a powerful case for reducing rates.

This is all from a short-term perspective. We should also be trying to find a policy path that works for the longer run. But for several reasons I think an early funds rate cut satisfies this longer-term test as well. For one--again without going through my whole list--most indicators of inflation are fairly quiescent right now and have been downgraded at least moderately since our earlier meetings. For another, as a number of people have said, if policy is out of equilibrium--as I think it is--to avoid instrument instability we should make our big moves back to the middle or even lean on one side early in the process, not late. Third, while I don't want to steal his thunder, Don is going to take us through some strategic simulations tomorrow and to me they further strengthen the case. I'll let Don explain all that tomorrow. This is an uncertain world, no indicator is perfect, and models should only be taken with a grain of salt. But it's hard to imagine that a reduction in the funds rate would be a mistake when so many signs are pointing in one direction. Thank you.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. Following the intelligent lead of my colleague, I also will truncate what I was going to say. I was going to begin by saying that the circumstances surrounding us seem filled with great uncertainty. But having listened to everybody who has spoken thus far, in some sense I think the circumstances surrounding us are filled with great unanimity and certainty, namely that we do have a risk of what some people euphemistically have called a banana. I don't think we are there yet.

CHAIRMAN GREENSPAN. We're on a slippery slope!

MR. FERGUSON. We may be on a banana peel! Let me note some of the reasons I think we're not fully there yet. First, most of the weakness that we've seen clearly is in manufacturing; it has not yet spread broadly into services, but it's broad and deep in manufacturing. Secondly, as we start or move toward the middle of this process of weakness, the banking sector still seems to be relatively strong, so that sector is unlikely to add to our problems at this stage at least. A third reason, and others have mentioned this, is that the real estate markets have been if anything relatively healthy.

Having said all of that, obviously I think the risks are primarily to the down side. We've already had quite an exposition on consumer confidence. I, like others, am quite surprised and concerned about the very rapid change we have seen in that. And even if it is a coincident indicator, it does not bode well for consumers actually helping to shore up the economy. And like Bill McDonough, I would also put perhaps more weight than others have on the state of business confidence. Obviously, a great deal of the economy's strength has been driven by investment behavior. In fact, the staff's expectation is that productivity will hold up. I presume that it is built into the forecast that we'll get back to a situation where equipment and software investment is positive as opposed to totally flat. In this expansion that kind of investment has been heavily financed by the markets. The financing gap, as I've said before, is quite large by historical standards, and that means that the tone in the financial markets is really quite important now. It is true that the markets showed a rebound to somewhat healthier conditions after our January 3rd move, but as the staff presentation pointed out, the commercial paper market could be described as anything but healthy. And we also have from the Senior Loan Officers' Survey ongoing evidence that conditions and standards with respect to loans for medium size and larger companies continue to be tight.

Others have raised the issue of strategy, so let me join in by commenting on my general sense of what it should be. I think we're faced with two alternatives. One, which is bad but relatively manageable, is that associated with the baseline forecast. The other alternative is far worse and perhaps even less manageable. In that case, it does strike me that the appropriate approach to strategy is to be very aggressive up front, recognizing that we have a chance later to see exactly how the medicine has gone down, if you will. I think it's also important to remember, and no one else has mentioned this, that we have a number of different things to say in our press statement in addition to our decision on moving the fed funds rate. And even if we move it down by 50 basis points today, having put in 100 basis points of easing within a month, it is far too early to suggest that the balance of risks is anything other than to the down side. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. In our perpetual journey along the economy's mythical curve, we came to a sudden hairpin turn late in the fourth quarter of last year. With a quick and aggressive maneuver, I believe we've stayed on track, but this passage is leaving us with a new landscape to negotiate. To belabor the obvious, there is no doubt that we are now in a slowdown of potentially ominous proportions. And yet, as the Greenbook recognizes, this could still prove to be a growth pause. After all, we've seen such pauses before in this expansion. And once we get this worrisome inventory correction behind us, we might be off to the races again. Indeed, there is still a lot of strength in place especially in the huge services sector of the economy. Among other factors, the banks are still healthy and open for business with rates much more attractive than several quarters ago. Labor markets are still tight, with unemployment still very low. And recent retail and other anecdotal evidence has been more upbeat. The very intensity of the inventory correction under way holds promise that unless demand implodes--and that's an important caveat--that correction will soon run its course. There does not seem to be much reason for a serious collapse and good reason to expect renewed strength. But to me an early return to very strong growth also seems unlikely.

Consider three of the major drivers of the recent boom. The first is consumer durables. Over the past twelve quarters, its growth was in the teens in five quarters and in two of them it was well above 23 percent. But that rate fell to minus 5 percent in the most recent quarter. Furthermore, consumer debt service burdens over this period rose to levels that match the high of the late 1980s. It's hard to see a new boom very soon in consumer durables.

Business fixed investment, another major driver, has traced much the same pattern. In the past twelve quarters it grew at annual rates in the teens in six of them, with growth in the first quarter of 2000 at 21 percent. In the most recent quarter it was at or near zero. Capacity utilization has fallen substantially below its average level. It's hard to see a new boom there soon.

Finally, the stock market rose steadily from August 1982 through March 2000, with the S&P 500 reaching a price-earnings ratio in the mid-30s. Today that measure is still well over 20, matching the previous high of 1992. From that level it’s hard to see much room for another sustained rise in the market that would rekindle the wealth effect.

In summary, Mr. Chairman, I believe we are at an important juncture. I’m optimistic that the economy can and will soon be okay, but I see a clear and present danger in the very short term. While this inventory correction runs its course, consumer behavior may be the key. If the consumer decides to go into hibernation, the entire economy could easily follow in a self-fulfilling prophecy. I hope we will aggressively counter that possibility now and then see what emerges in the spring. Fortunately, the outlook for inflation seems to give us a comfortable degree of room to maneuver. With two quarters of sub-trend growth already registered and the current quarter plus one to three more in prospect, the inflation outlook over the forecast period seems favorable. Thank you.

CHAIRMAN GREENSPAN. Thank you. Governor Meyer.

MR. MEYER. Thank you, Mr. Chairman. The trend of downward revisions in the staff and private sector consensus forecasts, as well as in my own, has continued over the intermeeting period. While they now point to near zero or even slightly negative growth in the first quarter, there is yet no evidence that the forecasts for the near term have themselves stabilized. There has been a lot of talk around the table of pessimism regarding the near-term outlook, so I thought I'd focus my remarks on the basis for some optimism about the recovery from this very sharp slowdown.

That optimism is founded on several considerations. First, I do believe that a period of below-trend growth, which now seems inevitable at least through the first half of this year and likely a little longer, will have beneficial aspects in terms of unwinding some of the excesses of the long period of robust growth. And I refer not only to the probable excesses of output relative to potential. I'm talking about excesses in equity valuations in some sectors, excesses in terms of a frenzied pace of investment that has produced over-capacity in some sectors, and excesses in terms of leverage in both household and business balance sheets. Now I admit that what I had in mind, or had hoped for, was a much more gentle version of what I called a reverse soft landing in response to our policy tightening. But the sharper version has the benefit of getting the job done quickly, allowing the Fed to ease as the process is under way.

The second reason for optimism is that I see, as the staff portrayed very well in its presentation, a series of reinforcing developments in support of a projected recovery in the second half of this year and into 2002. Monetary policy will clearly be supporting such a recovery, with the combined dissipation of the restraining effects of the earlier tightening and the effects of the recent and prospective easing. The prospect of further declines in energy prices remains good and the projected depreciation of the dollar is in my view plausible. And perhaps especially important is the assumption that the underlying pace of productivity growth will remain high, if not as high as was earlier projected. This suggests an accumulation of profitable investment opportunities at the low rates of investment projected through the first half of this year, setting the foundation for sizable increases in equipment spending in the second half and into 2002. Last, but probably not least among the forces that may support recovery is that we will have fiscal stimulus. I suspect that the coming fiscal stimulus may be understated in the Greenbook. I would not be surprised to see the tax cut become effective earlier and to be larger cumulatively or more front-loaded--or both--than implied in the Greenbook projection.

A third consideration that supports some optimism is that the sharpness of the decline in production that appears under way this quarter may reflect a very front-loaded inventory correction. Perhaps this will be an IT version of the traditional inventory cycle, one that is sharper but also shorter than classic inventory corrections.

To achieve a balance between the anxiety about the immediate weakness and near-term downside risks versus the optimism about a relatively quick revival and a move toward trend growth next year creates a real challenge for monetary policy. That's because of both the lags in the effects of monetary policy and the practical difficulties of rapidly reversing the direction of policy, especially from easing to restraint. The policy challenge is that there may be nothing or little we can do about the weakness in the economy during the period when it’s likely to be most intense, namely in the first half of

2001 and especially in the first quarter. But we can powerfully reinforce the rebound that the staff projects with only slight additional easing.

So the questions we face today are how much insurance we should buy against a sharper and more persistent downturn and what degree of rebound we want to encourage on top of the forces I have mentioned above. It’s relatively easy to see the appropriateness of front-loading, so I don’t think the decision that we face at our meeting tomorrow is that difficult. But I do believe we will face a challenge thereafter about how to continue.

CHAIRMAN GREENSPAN. Thank you very much. Have we heard from everybody? No, President Poole has not yet commented.

MR. POOLE. I didn’t know I was going to get the last word this afternoon.

In the Eighth District there is a sense of caution, but I think deep gloom would be the wrong term to use. People seem to feel that things have flattened out. The banking system appears to be strong; there is some increase in problem loans but not large numbers of defaults and delinquencies. Everybody is aware of the TWA bankruptcy and there is a great deal of local support in St. Louis for a quick reorganization in the bankruptcy court. It appears that TWA is going to be reorganized under the ownership of American Airlines, with essentially no employment impact. My guess is that all will continue smoothly on that front.

I’ve been searching to find the optimal level of gloom because I think it is too easy to be all one sided in assessing the current situation. Let me comment on a point that I don’t think has been mentioned. There is no question that December's weather was lousy. It was the coldest and snowiest December in many, many years. I think we need to try to sort out how much of what we are observing is an impact from days lost at work and days lost by retailers and so forth in December.

I have a sense that December's weather is not the primary story, but let me give you a few numbers that I got from my UPS contact. Domestic airfreight last year through November, compared to the same 11-month period of the previous year, was up 3.1 percent. But in the month of November 2000 as compared to November 1999, it was down 1.3 percent. The same was true for international traffic. In 2000, year-to-date through November, international airfreight was up 11-1/2 percent; but just comparing November 1999 to November of 2000 it was up only 6 percent. So November is the month when the downdraft really hit and that predates the worst of the weather.

However, my contacts at UPS and FedEx both are projecting an upswing in the second half of 2001 after a slow first half, which is consistent with the pattern for the year that our forecast shows. UPS is putting a contingency plan into place, however. The company has a working assumption that business in the year 2001 will be up 11 percent over the previous year, but is developing a contingency plan that assumes business will be up only 6 percent. So UPS managers are knocking 5 percentage points off their growth assumption and making plans for what they will have to do if that scenario materializes.

My UPS contact says that his folks have surveyed their 300 major customers and those customers see weak business in the near term but a pickup in the second half of the year. So, again, that fits with the picture that we've developed.

The only other point I'd like to mention in terms of the national economy is that to a large extent our sense about how these processes work comes from a long experience with business cycle fluctuations. Historically, until the 1990-1991 recession, both long- and short-term interest rates turned at the cycle peak or within plus or minus two months from the peak. This time, long rates reached a peak, depending on exactly which series one looks at, back in the spring of last year and have gone down quite a bit in recent months. Al Broaddus noted that money growth at this point is well maintained. Historically, there was a substantial cycle in money growth. We don't have that this time. Past recessions have always involved residential construction. Typically we see big declines in housing. This time housing starts are holding up. So I think the prospects are that, yes, the economy is going to be weak. But I don't believe that we have a falling-out-of-bed situation. We do need to respond; I'm not trying to say that we don't. But I think we want to be careful that we don't have a sense of more gloom than is justified by what we know. I'm talking about the optimal amount of gloom here!

CHAIRMAN GREENSPAN. You did get the last word. We will recess until 9:00 a.m. tomorrow morning. Thank you, everybody.

[Meeting recessed]

Wednesday, January 31, 2001--Morning Session

CHAIRMAN GREENSPAN. Mr. Madigan.

MR. MADIGAN. As background for this briefing, I have distributed two charts from the Bluebook in a package entitled "Material for Staff Presentation on Monetary Policy Alternatives." 3/

> The baseline scenario, shown by the solid lines in chart 4, used the key elements of the staff's view of the macroeconomy to extend the Greenbook forecast through 2005. Under this baseline, and in contrast to those shown in Bluebooks in recent years, monetary conditions are seen as already relatively close to those that, over time, would foster sustainable economic growth. In effect, the real funds rate is now estimated to be very close to its long-run equilibrium value--the rate that eventually would result in no output gap and stable inflation. The FOMC is assumed to reduce the nominal federal funds rate slightly further--another 25 basis points at this meeting--and then to hold that rate over the forecast period. As shown in the upper right-hand panel, the real funds rate eases somewhat more over the balance of this year because short-term inflation expectations, as proxied by four-quarter inflation in the core PCE shown in the lower panel, edge up a few tenths over 2001. These lower real short rates help cushion the negative shock that the economy currently is experiencing. Nonetheless, the unemployment rate, the middle panel, rises over the course of this year to nearly 5-1/4 percent. Still, core inflation declines only very gradually over the next few years because the effective NAIRU edges up over time. This occurs because the catch-up of wage gains to previous productivity increases, as those increases level out, brings the restraining effects on inflation of the previous acceleration in productivity to an end.
>
> The other scenarios depicted in chart 4 focus on two major supply-side uncertainties--the level of the NAIRU and prospects for productivity. The dot-dash line assumes, in contrast to the staff's view, that the current 4 percent unemployment rate is sustainable. The dotted line portrays the much less appealing possibility, discussed by Dave Stockton yesterday, that productivity growth soon reverts to its 1973 to 1994 average of about 1-1/2 percent, rather than remaining at the 3 percent rate of the baseline. In both cases, monetary policy operating under a Taylor rule would ease. But the

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3/ A copy of "Material for Staff Presentation on Monetary Policy Alternatives" is appended to this transcript. (Appendix 3)

Committee's choices are considerably more attractive under the 4 percent NAIRU scenario than in the baseline or in the productivity slowdown scenario. Here we have assumed that the Committee opts to take the windfall partly in lower unemployment than in the baseline--the dot-dash line in the middle panel--and partly in lower inflation, the lower panel. With structural productivity continuing to grow strongly, the estimated long-run equilibrium real funds rate is about unchanged from its roughly 4 percent baseline level, but the actual real funds rate can run well below this value for the next few years to foster the spending consistent with the higher sustainable path of output. Achieving that track for the real funds rate requires a considerable reduction in the nominal funds rate--to nearly 4-1/2 percent by the end of next year--before tightening after that.

Chart 5 shifts the focus from the supply side to the demand side of the economy. The dot-dash line portrays a situation in which final spending is temporarily weaker than in the baseline, pushing the economy into a recession this year. The Taylor rule calls for aggressive easing, with the funds rate declining to 4-1/2 percent by the fourth quarter as unemployment rises steeply to about 6 percent. Inflation, after initially edging higher because of weakness in the dollar, eventually drops below the baseline. Ultimately, though, with underlying productivity growth remaining strong, the real funds rate needs to be returned to its estimated long-run equilibrium value--a little above 4 percent.

The dotted lines, by contrast, assume that the stalling in output that is currently evident is due entirely to the desire of businesses to adjust inventories rather than to persistent weakness in final demands, which rebound promptly in the second quarter. The upshot is a growth pause. In this case, the Taylor rule, which looks at the current output gap rather than the situation likely to prevail in the future, still calls for an easing in the funds rate to 5-3/4 percent in the current quarter. It then reverses course fairly quickly as pressures on resources remain intense and as policy needs to adjust to the permanently higher equilibrium real rate that results from stronger spending propensities than in the baseline. Even with the tighter policy, policy does not succeed completely in capping inflation near current levels during the simulation period.

Market prices suggest that investors see a different economic outlook than the one portrayed in the baseline. In particular, futures quotes now reveal expectations that you will cut the funds rate to nearly 4-1/2 percent this year, before beginning to firm policy in 2002, and longer-term yields do not indicate concern on the part of investors that such a policy course will produce heightened inflationary pressures. Apparently, many investors subscribe to some combination of the low NAIRU possibility explored on the previous chart and the potential for appreciable economic weakness assumed in chart 5.

Market quotes and surveys suggest that investors, consistent with this economic outlook, anticipate that you will cut the funds rate by at least 50 basis points today--with a few apparently seeing the possibility of a 75 basis point move--and state that the risks remain weighted toward economic weakness. Consequently, the 25 basis point action of alternative A, even if it were accompanied by the anticipated balance of risks statement, would likely lead to a sharp selloff in financial markets.

Nonetheless, the Committee may see benefits from this course, especially if you think that market interest rates probably exaggerate the degree of monetary ease that will ultimately be consistent with sustainable growth and stable inflation. Taking account of the usual lags in the effects of policy, the more accommodative financial conditions that would evolve from action now would have little effect on near-term weakness as inventories are adjusted. Indeed, the bulk of its effects may be felt when the weakness has already passed and when fiscal expansion measures may just be coming on line, with the combination potentially providing excessive stimulus to spending.

But, as was evident from your discussion yesterday, many Committee members see good reasons for choosing the stronger, 50 basis point action of alternative A′. Even if you view the staff outlook as the most likely outcome, many of you clearly put substantial weight on the possibility that the economy could turn out to be appreciably weaker. Such weakness could be prompted by any number of factors, such as deteriorating confidence, on which you received another reading yesterday. But it could be exacerbated by a substantially larger-than-expected negative response in financial markets to a more measured policy action, resulting in a substantial further pullback in risk-taking. That could involve a selloff in the stock market, a widening of spreads in the open markets, and additional stringency in loan terms and standards at financial intermediaries. Moreover, a sense that the staff may be too pessimistic about the sustainable degree of labor market tightness would suggest that inflationary pressures going forward could remain relatively subdued even with the added stimulus from more aggressive action at this meeting and consequently stronger aggregate demand. This, and the fact that inflation expectations evidently have remained reasonably well anchored, may be seen as giving the Federal Reserve scope for decisive action to shore up spending and output, and even to front-load such action to help safeguard against cumulating weakness.

With regard to the balance of risks sentence, investors anticipate that a 50 basis point move today would be accompanied by a statement that the risks remain weighted toward economic weakness. Such an assessment would seem justified, even after a 50 basis point reduction, by the lack of firm evidence that growth has stabilized, much less begun to rebound, and

> by a sense that inflation pressures are more likely to abate than intensify if demands remain weak. A statement instead that risks were balanced would surprise market participants, who, as noted, seem to be anticipating nearly 100 basis points of further easing this year even after a 1/2 percentage point action today. Markets would probably sell off in response as prices adjusted to the prospect of a much flatter trajectory for the funds rate. If the FOMC announced that it saw the risks as still weighted toward weakness, any immediate reaction would probably be muted, although it seems more likely to be a bit negative than positive, given the perceived possibility of a 75 basis point move today. There is a chance that such a statement could condition markets to rally sharply further in the event of apparently weak economic data. The wording of the announcement could help make clear that, although the FOMC might see the risks as still skewed toward weakness, it remained optimistic about longer-term prospects and recognized that considerable stimulus was now in the pipeline. The Chairman, of course, also will have the opportunity in the semiannual monetary policy testimony to temper market perceptions should they evolve in a way inconsistent with the Committee's objectives.

CHAIRMAN GREENSPAN. Questions for Brian? Everyone is talked out!

Let me start by reviewing what we discussed earlier just to give us a little context. We experienced a remarkable surge in activity during the first half of last year, partly in response to Y2K. We saw some extraordinary numbers. Production numbers for some high-tech industries were up 50 percent and more on a year-over-year basis. Orders were coming in at a pace that caused order backlogs to surge almost vertically upward. The acceleration in activity was very clearly unsustainable in terms of any plausible longer-term scenario, and hence it was by no means a surprise to see a slowdown in growth. What we didn't anticipate was how fast that slowdown would be. In retrospect, what we have seen recently is an obvious deceleration in business investment in durable equipment and consumer expenditures on durable goods. A prime example of unsustainable growth in spending on the consumer side was the rise in the number of cars on the road at a pace that just could not be sustained. We were going to run out of parking and highway space relatively soon at the motor vehicle sales rates we were experiencing in the early part of last year! The capital stock, especially in the high-tech area, began to rise at an inordinate rate. Our estimates of industrial capacity growth indicated an extraordinary pickup in a number of the high-tech areas that could not realistically be projected to continue.

As I have noted before, the demand for a broad range of products in the high-tech area may be doubling annually, but supply has been increasing even faster. As a consequence, the industry has experienced a glut that has eroded prospective profitability even though underlying demand has been moving up at a very rapid pace. A goodly part of what is going on in the high-tech area clearly fits that description because there is no evidence of which I'm aware to support a conclusion that these technologies are approaching a state of maturity. To be sure, personal computers have exhibited some elements of the tail end of the "S" curve, but once we get beyond personal computers and some related technologies, there's nothing in the high-tech area that is even remotely suggestive of a maturing process. I say that even though the Internet consumer markets look like a dud in the sense that no one really has been able to find a highly profitable means of using the Internet in a business-to-consumer mode.

What has happened, however, is the emergence of extraordinary improvements in the cost structure on business-to-business applications, with unit costs falling in a lot of areas. Not only has the ability of business firms to control their internal cost structures with respect to physical investment flows and inventories continued to improve, as we can see very readily on the factory floor and in all sorts of service areas, but it also has become quite apparent that more efficient inter-company interactions are having a quite measurable effect on overall productivity. In that regard there is just no evidence that we are close to an inflection point in relation to an "S" curve. So, as best I can judge, we're not looking at the end of this high-tech boom. What we are observing is a really quite dramatic intra-long-term cycle, if I am allowed to choose simple terminology. [Laughter]

The stock adjustment that is now under way clearly stems from softening final sales. We can see it in motor vehicle sales, in appliances, and in new orders for all sorts of capital equipment. Final sales have fallen at a pace that has been faster than anybody expected--I'll get back to that in a moment--and inventories have backed up very quickly. But because improved supply-chain management and flexible manufacturing techniques are in place, the response in production has been very quick and, as we've observed, quite pronounced. But while consumption is falling fast, we have not yet seen, at least through the month of December, any clear evidence that inventories are being liquidated. The rate of accumulation has come down very dramatically, but the decline in production that we have observed has not been enough to move output below final sales. As a consequence, as best we can judge inventories of manufactured goods--forward of the producers and in the distribution channels basically--are probably at roughly zero inventory change as of December. The presumption is that we are getting some liquidation in January but that we are nowhere near the tail end of this inventory adjustment process. In other words, it's not as though the liquidation began in October and will be over by February. There's no evidence that that is the case. We do know that production and company receipts are falling, but they have not fallen below the level of final sales, so more inventory adjustment is ahead of us.

What has to happen first is that the inventory-sales ratios have to stabilize, a process that is probably under way now, and then those ratios have to fall to the level consistent with the downward trend in those ratios associated with the adoption of just-in-time inventory practices. And indeed the Greenbook projects an inventory trend that in effect accomplishes that. One can argue that first- and second-quarter inventory numbers may have to be redistributed in relation to the Greenbook forecast, but at least at the end of the forecast period the Greenbook has inventory-sales ratios back down in line with where we would expect them to be on a just-in-time basis.

The inventory adjustment appears to have been far faster than we expected, principally as best I can judge--though we really won't know this except in retrospect--as a consequence of improvements in inventory management. Obviously, we are observing the effects of the remarkable changes that have occurred, for example, in the area of bar code scanning in retailing. Some 20 years ago merchants still had to use paper records, store them, and reorder periodically. Their current inventories were to a large extent unknowable until they shut down the store and took an inventory. Even then they didn't know precisely what inventories they had until maybe weeks later. Now businesses know in real time, and in an ever growing number of cases there are Internet or electronic interface systems that in effect work off the bar codes in the retail stores to reorder from suppliers. The suppliers probably see the data before the vice president of the retail establishment sees them.

If the current inventory adjustment process is indeed moving fast, then any presumption that the process will take as long as it did ten years ago, when the last significant cyclical contraction occurred, is probably not going to hold up. I don't know how fast the current inventory adjustment is going to go, but it will surely be faster than in the past. The danger is that while the adjustment process is faster and technology has augmented its speed, human nature has changed not at all. And human nature responds negatively to change and uncertainty. As I mentioned yesterday, when the economy is in an expansion phase, which is still going on but slowing down, increased uncertainty in and of itself raises risks and induces people to differentiate among the risks they are willing to take. And if the fabric of confidence is broken because it is truly shot, the issue is never which among alternative risks individuals will choose. They don't want to take any risks; they don't want to know about the different levels of risks; they want to be wholly liquid. And that, as I mentioned yesterday, is the reason why in the fall of 1998 we found the extraordinary circumstance where even riskless instruments, off-the-run Treasury instruments, were selling at 20 basis points above those that were on-the-run. Now, that has nothing to do with the taking of risks; it's a sheer liquidity fear response.

We are nowhere near that point at this stage despite the fact that confidence has deteriorated a great deal, albeit from very high levels. I trust no one has been raising the analogy about falling off the proverbial 30-story building. [Laughter] In any event, what's happening is understandable: The adjustment process is quicker.

We do not seem to be experiencing a significant acceleration in final sales in January. First of all, despite the drop in consumer confidence, chain store retail sales data do not look bad. They have risen from their December levels, and last week's data were basically not bad. As David mentioned yesterday, the information we are getting from the auto companies indicates that retail demand through the first 20 days of January was about where it was on average in December. But you will recall that December started off a lot better than the average for the month. Indeed, when we questioned the automakers on December 4 or thereabouts, they came back with estimates for the month that were only modestly lower than sales in November. Ten days later, the floor had fallen out of the motor vehicle market. So even though we don't have 10-day motor vehicle sales anymore, my suspicion is that the 10-day sales would have been dropping substantially during December. January sales thus far have been higher than they apparently were in late December. Now the actual published number for January is going to be higher basically because sizable fleet sales, of which we have been apprised on a confidential basis, are being put into the numbers, presumably for marketing purposes. That is going to exaggerate the extent of the turnaround unless sales in the last 10 days, for which we have no information, fall on their face. Remember that in the motor vehicle business the last 10 days account for far more than one-third of the month's sales. So while it's quite possible that things could turn around, there is no evidence yet that that is the case.

I don't know whether or not the housing sales figures have been published.

MR. STOCKTON. They are due out at 10:00 a.m.

CHAIRMAN GREENSPAN. The figures will be quite strong. Now, having said that, of all the poor statistics we have, the housing sales numbers win the prize every year. They have the largest revisions and often even the sign is not right. But at this particular stage, I am not inclined to look a gift horse in the mouth. I do think the proposition that final sales have not deteriorated in any significant way in January is at least consistent with the fragmentary data that we have. And the clear weakening in production that we're getting in certain areas of the economy in January, although production is not falling on its face, is probably an indication of the inventory liquidation that is now under way.

Through all of this, as I have indicated previously, there is little evidence of which I'm aware that long-term profit expectations have deteriorated to any significant extent. Indeed, in terms of the data that were shown to us yesterday, estimates by Street analysts are off a bit for the long term but nowhere near the extent to which the short-term results are.

I must say, however, that coupled with all of this is a really serious energy problem. It is not a seasonal problem and it is not about to go away. The natural gas production problem is very severe and is feeding into the electric power area. We have a newly aggressive OPEC, which is not going to make things altogether easy. The presumption of an early return to lower energy prices just is not consistent with anything we can see out there. Energy is a major player at this point. Clearly, as has occurred every time in previous energy crises, it has sapped consumer purchasing power. So over and above the capital stock adjustment that is bringing final sales down, the drop in consumer purchasing power stemming from both oil and natural gas developments is significant. And insofar as anyone can judge, the increased cash flow to domestic oil and gas producers is not creating a degree of capital investment that is offsetting the decline in consumption expenditures. So over and above the so-called "tax at the border," which is the result of rising prices of imported crude oil and which exerts a full dollar-for-dollar drain, we presumably are also getting a net drain for domestically produced energy in that income is being shifted to those whose propensity to spend is lower than it is for those from whom purchasing power is being taken.

The profit margin declines owing to cost pressures from energy are quite significant. Data that we have put together here indicate that direct energy costs accounted for about one-fourth of the increase in unit costs of nonfinancial and nonenergy corporations in the second half of last year. Of the remaining three fourths, an unknown part doubtless reflects energy's impact on final goods sales, whose softening has led to a lower level of aggregate production and has tended to slow cyclical productivity. So the energy effect is clearly a good deal more than one-fourth if one is assessing what caused the significant reduction in the total profit margins of nonfinancial corporations, excluding energy corporations, during the third and fourth quarters. Obviously, the margins of energy corporations went up, but the increase certainly was far smaller than the declines that have been occurring in the nonenergy sectors.

As a consequence, there is more to the overall economic outlook than just strictly the question of an adjustment process stemming from capital stock corrections. We have a real problem coming in from left field. It is in a sense wholly unrelated, although one can argue that a sizable part of the problem is increased energy demand, which in turn is a function of the same technologies as those that are exerting pressure on many other parts of the economic system. But whatever it is, it's there, it's important, and as far as I can see, it's not going to go away for quite a while. We have put together a quarterly energy accounting system for the corporate sector, and as far as I can guess the codes were not written for the short term; they were written to last. I think we'll be keeping that system up to date for quite a while because I think energy is becoming a major player in a number of the data that we tend to look at.

In summary, we've got a very rapidly changing economy, one that still has a distance to go on the down side. The key characteristic at this stage is an inventory liquidation process, which of necessity always ends and sometimes induces a V-shaped recovery. The January data and the continuing leap in structural productivity growth both suggest that the V-shaped recovery is the most likely outcome. But after experiencing this huge bubble of speculative activity and looking at price-earnings ratios, which are not by any means depressed, we can't be sure that this expansion will just slow down, then pop up, and continue the way it was. We may have a deeper problem facing us here, though I grant it has a low probability. I would feel a lot more comfortable if a number of the speculative elements in the economy were now much reduced, if Baa-Aaa spreads were to come down to where they were a year or so ago, and if a lot of the skittishness in the banking industry were not there. And I also wish that Japan were doing better because we can't forget that it has the second largest economy in the world and it is in serious trouble. So far in Japan all we've seen is a sluggish quarter-by-quarter performance that has not had any repercussions. But hibernating bears also look tranquil. Some day that huge economy is going to wake up or really go to sleep, and I don't know which of those two is really the most likely outcome.

All in all, I think what is involved here is a judgment about how this economy is evolving. To me the evidence strongly suggests that we are in an advanced high-tech and just-in-time inventory type of economic system, including the capital goods markets where adjustments happen far faster because information is so much more readily available. If that is the case, since we are dealing with mood swings that are rooted in an unchanging human nature, then I think it follows that monetary policy must also compress itself into a narrower timeframe. That means we have to move faster, sooner, quicker, and complete the operation in a shorter period of time. At least that's what strikes me are the implications for monetary policy of this new high-tech environment.

In that context, moving by 50 basis points today, as a number of you have suggested, strikes me as the right move along with retaining the balance of risks statement to the down side. I have been concerned about the possibility that our moving so fast in a month would suggest either a knowledge of facts that nobody else knows or that we are getting scared. Fortunately, I guess, the markets as a result of yesterday's consumer confidence index have now put something like a 20 percent probability that we'll move 75 basis points. And in the preliminary draft of our press statement that I'll read to you, if we choose 50 basis points, there is a general statement that productivity gains are holding up. The main purpose of that statement is to recognize the severity of the problem we have and the necessity to act, while still indicating that the underlying structure of the economy appears to remain substantially in place. That's my reason for including it. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I fully support your recommendation and the reasoning for it. I think the only possible alternative would be to ease even further, and in my view that would be very unwise because it clearly would give an indication that we do know something that other people don't know or that we're scared, neither of which is the case. Therefore, I think a 50 basis point easing with the balance of risks statement toward weakness is the appropriate answer.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. I'm in agreement with your recommendation, Mr. Chairman.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I fully support the recommendation. Let me comment briefly. I remarked yesterday that I thought the probability of recession was uncomfortably high.

But what I would say even more strongly is that I recognize that I at least can't forecast turning points. And while I would like to base policy going forward on a forecast, I have so little confidence in forecasting how the economy will perform over the next two, three, or four quarters that I'm reluctant to do that. So, in trying to get another perspective on policy, I'm thinking about real interest rates and the real federal funds rate. And it seems to me that the funds rate does need to be lower at this stage, certainly by 50 basis points at least. I think that's the appropriate move now and I agree that a bias in the language toward weakness is appropriate.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Mr. Chairman, I certainly support your recommendation. I'd like to make just a brief comment about the lags in this process. I think it's important to recognize that market interest rates have moved ahead of our actions in anticipation of what we're going to do. In explaining this move, when we're giving speeches and that kind of thing, we should emphasize that a lot of ease has already been reflected in the marketplace ahead of our actions. For example, the two-year constant maturity rate moved below 6 percent in October, dropped below 5-1/2 percent in early December, and then by early January it was down to about 4-3/4 percent. So the market has moved ahead of us and we have some easing already in the pipeline, which clearly shows up in the housing numbers, as I mentioned yesterday.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Mr. Chairman, I support your recommendation. I also think that your analysis is absolutely right in the sense that what we're dealing with is a high-tech, highly productive economy that is slowing very quickly. We do have to be careful because it could pick up again, but at this stage I think 50 basis points is absolutely the right move and the balance of risks statement toward weakness is also correct.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I certainly agree with your recommendation. While we have reminded ourselves over and over, including in the comments you just made, that we can't do anything about the short term, I think we can shore up attitudes and expectations about what's likely to unfold. In the notes I had written out on policy, my final points were related to the statement that we make, which is where you ended your remarks. While I would agree that the markets won't be surprised by our action today, I was surprised after our last meeting at how some business leaders and consumers on the fringe did have the sense that perhaps things were worse than they had thought. I believe that danger is still there, even given the expectations in financial markets. So I think we have to choose our words as carefully as we can and try to eliminate some of the fear that people might read into another 50 basis point move quite so soon. Nevertheless, I certainly agree with the recommendation.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I enthusiastically support your recommendation. It seems to me that the financial markets clearly are expecting a move of this magnitude and if we were not to move along these lines, I think it could cause some problems.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I support both parts of your recommendation. I believe we've all been particularly impressed by the speed of this slowdown and I'm hopeful that this action will help us to achieve a quick recovery and to avoid moving into a recession.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Mr. Chairman, I support the recommendation. Yesterday I may have violated Bill Poole's rule about optimal degree of gloom. In fact, I suppose I consider the high-tech V-shaped recovery the most likely outcome. But I do think there is some probability that we will see something worse than that. I strongly support your idea that in view of today's economy we should be mindful that policy should be front-loaded and operate faster and quicker. A part of me thought you might recommend going to alternative A″, which was a 75 basis point cut, and I'm not sure that you couldn't have talked me into that. But I will go with this proposal.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I also agree with both parts of your proposal. Whether one thinks like Governor Gramlich that things could well be worse, or like I do that fiscal stimulus might come earlier and be larger than expected and we could have a rebound sooner than anticipated, front-loading policy right now seems to me the wisest course. It seems appropriate to get the stimulus in there, to get its impact sooner, so perhaps it will improve whatever is going to happen 9 or 10 months from now. In thinking about the press statement, I had reflected on whether a balanced risk statement would work to solve the problem that President McDonough mentioned regarding the possibility that the size of the cumulative easing moves over a month's time might feed into the pessimistic psychology about the economic outlook. I wondered whether a balanced risks statement might help calm things. But after listening to the television a bit this morning and seeing the degree to which there were now expectations in the market of an even bigger move--and not being able to reconcile in my own mind the real risks with a balanced risk statement--I came around to your position. So, I'm wholeheartedly in agreement with your recommendation.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. I support your recommendation, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. I support your recommendation, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support your recommendation, Mr. Chairman. I also want to associate myself with President Guynn's comments about the need to be careful with regard to the psychology associated with the wording of our press statement.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you. I support the 50 basis point move today and I think 100 basis points of easing in a four-week period does achieve a significant degree of front-loading. It is early and substantial. And I would support that even though I think the baseline forecast is the best projection to go with. It's the one I certainly hope is correct. But the funds rate path that was coupled with the baseline forecast is not the one that we prefer. Where that leaves me is that if the baseline forecast does turn out to be the correct one, then we're going to need to move the funds rate back up, perhaps to where the staff says it is going to be two years hence. And it's getting difficult for me to imagine the path that we will have to follow if that forecast is right. I say that because the pressure for further cuts at the March meeting and especially at the May meeting, if we have a negative GDP number for this quarter and rising unemployment, is going to be huge. It will be a time once again when the market fully expects us to move, when the analysts and everybody else say we're going to move, and we will have to disappoint them.

CHAIRMAN GREENSPAN. We've done it before. President McTeer.

MR. MCTEER. I think we can wait and worry about that later. For the current circumstances, I think your recommendation is just right.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Mr. Chairman, I support your recommendation. I believe that's the right move for today but I completely concur with the remarks of President Jordan. I think we have to exercise care in the expectations that we encourage in the markets about the certainty and the cumulative size of the likely amount of future easing, particularly in light of what I view as a still plausible and sensible baseline scenario in the Greenbook.

One point I would like to make is that I've always looked forward to these two-day meetings as an opportunity to talk about some broader issues on the strategy of monetary policy. This morning doesn't seem to be the time to do that, given the nature of the discussion around the table. But I would hope, as we plan the agenda for future two-day meetings, that we would allow time for some comments that I would like to make about the appropriateness and direction of policy, how we monitor the monetary aggregates, and how we set inflation targets and our rules packet. I'm always amused that we start off from the inflation target that John Taylor set but do so without any communication from the Committee to the staff about the inflation objectives Committee members might have. But I'll save that topic for future discussions and express my hope that future agendas will allow more time for such discussions.

CHAIRMAN GREENSPAN. We can do that prior to the July--if you'll excuse the expression--"Humphrey-Hawkins" testimony.

VICE CHAIRMAN MCDONOUGH. It's the semiannual--

MR. KOHN. The semiannual Monetary Policy Report.

CHAIRMAN GREENSPAN. May I ask the Federal Reserve Board to adjourn to my office to discuss the discount rates? Let me also request that Lynn Fox distribute the preliminary draft of our press statement.

MR. KOHN. Do you want to vote first? You haven't taken the vote yet.

CHAIRMAN GREENSPAN. We didn't? [Laughter]

VICE CHAIRMAN MCDONOUGH. That's something to report in the minutes!

CHAIRMAN GREENSPAN. I was going to do that when we came back, but I guess not.

VICE CHAIRMAN MCDONOUGH. That's an abnormal sequence of FOMC proceedings.

CHAIRMAN GREENSPAN. I appreciate the assistance. Would the Secretary read the text?

MR. BERNARD. The wording is from page 17 in the Bluebook: "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the

Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 5-1/2 percent."

With regard to the balance of risks sentence for the press statement: "Against the background of its long-run goals of price stability and sustainable economic growth, and of the information currently available, the Committee believes that the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Hoenig	Yes
Governor Kelley	Yes
Governor Meyer	Yes
President Minehan	Yes
President Moskow	Yes
President Poole	Yes

CHAIRMAN GREENSPAN. Vice Chairman, do we now have your permission to have the Board members meet in my office?

VICE CHAIRMAN MCDONOUGH. You certainly do!

CHAIRMAN GREENSPAN. I request that we have a temporary recess.

[Meeting recessed]

CHAIRMAN GREENSPAN. Any comments, concerns, or otherwise about the draft press release?

MR. POOLE. Mr. Chairman, Larry Meyer and a couple of other people have asked why the St. Louis discount rate change is not effective today. The reason is that the State of Arkansas has some bank usury ceilings that are tied to the discount rate. As a practical matter, the change in the discount rate can't become effective until the following day. It has to do with Arkansas law.

CHAIRMAN GREENSPAN. So you will go with the new rate officially tomorrow?

MR. POOLE. That's correct. We can't make it effective immediately.

CHAIRMAN GREENSPAN. Okay. Is this press statement satisfactory to everybody then?

MR. MCTEER. I think this is the first time the press release has made reference to when the discount rate change is effective. This seems a bit ambiguous because not all of the Reserve Banks are a part of it. I think it might be better not to include the entire last sentence.

VICE CHAIRMAN MCDONOUGH. Normally we do indicate when it's effective.

MR. PARRY. Some Reserve Banks are not in and it's confusing. Is that what you're saying?

MS. FOX. Actually, the sentence can be modified to say that the change is effective in the Districts noted and is effective for St. Louis the next day. Maybe that would be better.

CHAIRMAN GREENSPAN. That's probably not a bad idea. In other words, the change is effective for eight Banks or--

MS. FOX. In those Districts the change is effective immediately. In St. Louis, the change is effective tomorrow.

MR. MEYER. Is it necessary? It seems there is more detail than is necessary in this release.

SEVERAL. Yes, in this release.

SPEAKER(?). Have we ever said this before?

MS. FOX. We usually say this when St. Louis is included. I don't have a strong feeling about it.

VICE CHAIRMAN MCDONOUGH. I would take it out.

MR. POOLE. I think we could leave it out of this statement. You might have to explain it, but--

CHAIRMAN GREENSPAN. You know, we don't need it. We can say, "In taking the discount rate action, the Federal Reserve Board approved requests submitted by the boards of directors of the Federal Reserve Banks of New York, Philadelphia, Cleveland, Atlanta, Chicago, St. Louis, Minneapolis, Dallas, and San Francisco." Period.

MR. POOLE. Full stop.

MS. MINEHAN. I know our boards of directors have to vote on it, but the reality is that we'll all pass it this afternoon.

MR. PARRY. Not necessarily.

SPEAKER(?) It won't be effective today in St. Louis.

VICE CHAIRMAN MCDONOUGH. For some it may be tomorrow.

MS. FOX. Let's just take it out. If people have questions about it, we can answer them.

MR. FERGUSON. Bill, does it matter to you if we announce when it's effective in your District?

MR. POOLE. Well, to me the way to think about it is that the Board accepted the recommendation from the St. Louis Bank but because of our peculiar situation as a standard practice the change has to become effective the following day. But I don't think we need to have that detail in the press statement.

MR. FERGUSON. But it's not important to you that we announce--

MR. POOLE. What is important is just the fact that the Board accepted our recommendation. That is what you did, and that's all you have to say.

CHAIRMAN GREENSPAN. That's what's usually done.

MR. FERGUSON. That's the operative point.

CHAIRMAN GREENSPAN. The operative issue is that we accepted the recommendation of the change you wish to implement. We have now completed our formal agenda. Our next meeting is scheduled for March 20 and with that we can adjourn our FOMC meeting.

END OF MEETING