Meeting of the Federal Open Market Committee on March 17–18, 2009

A joint meeting of the Federal Open Market Committee and Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, March 17, 2009, at 2:00 p.m., and continued on Wednesday March 18, 2009, at 9:00 a.m. Those present were the following:

Mr. Bernanke, Chairman
Mr. Dudley, Vice Chairman
Ms. Duke
Mr. Evans
Mr. Kohn
Mr. Lacker
Mr. Lockhart
Mr. Tarullo
Mr. Warsh
Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

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

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Sullivan, Weinberg, Wilcox, and Williams, Associate Economists

Ms. Mosser, Temporary Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Frierson, Deputy Secretary, Office of the Secretary, Board of Governors

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

Ms. Bailey and Mr. English, Deputy Directors, Divisions of Banking Supervision and Regulation and Monetary Affairs, respectively, Board of Governors

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

Messrs. Leahy, Nelson, Reifschneider, and Wascher,[1] Associate Directors, Divisions of International Finance, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

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

Mr. Lewis, Economist, Division of Monetary Affairs, Board of Governors

Ms. Beattie,[1] Assistant to the Secretary, Office of the Secretary, Board of Governors

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

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

Mr. Sapenaro, First Vice President, Federal Reserve Bank of St. Louis

Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively

Messrs. Hilton and Schweitzer, Senior Vice Presidents, Federal Reserve Banks of New York and Cleveland, respectively

Messrs. Clark, Gavin, Klitgaard, and Yi, Vice Presidents, Federal Reserve Banks of Kansas City, St. Louis, New York, and Philadelphia, respectively

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

[1] Attended Tuesday's session only.

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March 17, 2009—Afternoon Session

CHAIRMAN BERNANKE. Good afternoon and happy St. Patrick's Day, everybody. I'd like to start by welcoming Governor Tarullo to his first non-video [laughter] FOMC meeting. Dan has been here for a while, and he's already making very substantial contributions. We're happy to welcome him to the table. I'll also mention that we will have a dinner tonight, and our special guest will be Randy Kroszner. This is a joint Board–FOMC meeting, so I need a motion to close the Board meeting.

MR. KOHN. So moved.

CHAIRMAN BERNANKE. Without objection. The first item on the agenda is Desk operations and liquidity programs. The FOMC asked for lots of information, and now you're going to be sorry. [Laughter] We have a record number of presenters who are going to cover a range of issues relating to our balance sheet, our lending programs, and a variety of policy options. In order to make sure this is not a three-day meeting, I'd like you to hold your non-clarifying questions till the end. If you have clarifying questions, by all means ask them, but at the end we'll have an opportunity for full Q&A for the presenters. So let me turn it over now to Trish Mosser.

MS. MOSSER.[1] Thank you, Mr. Chairman. Financial market developments during the intermeeting period have been driven largely by three factors: continued sharp deterioration in global economic conditions, uncertainty and pessimism about the health of financial firms, particularly commercial banks, and reactions to a wide range of unconventional policy measures by many central banks and governments.

Despite last week's rally, as exhibit 1 shows, global equity prices are sharply lower. The S&P 500 has fallen 16 percent since the beginning of the year. Of course this is much better than a week ago; as of last Monday, the S&P 500 was down

[1] Materials used by Ms. Mosser are appended to this document (appendix 1).

25 percent for the year. Foreign stock markets, which had fallen 15 percent to 25 percent from the beginning of the year to a week ago Monday, are now down "only" 5 percent to 17 percent for the year. This, of course, reflects the deep, nearly global recession which has occurred in response to the financial crisis. The sharp contraction in credit is now a global phenomenon, resulting in credit losses, write-downs, and financial deleveraging occurring nearly everywhere.

Financial firms also had a bit of a respite last week, in part based on predictions of better first quarter earnings, but overall they remain very distressed. The continued uncertainty regarding both the health of financial firms as well as the nature of government assistance programs has weighed on their capital structures. As can be seen in exhibit 2, both common and preferred equity indexes for financial firms are down sharply during the intermeeting period. In fact, preferred equity of financials has fallen more than 20 percent since late January, while common equity prices are down less than 10 percent, reflecting increased risk of suspended dividends or conversion of preferred equity to common. This trend is even more pronounced for those firms that have already received government capital and, thus, for which the possibility of losses further up the capital structure is perceived to be largest.

Perhaps more jarring is the very large widening of financial firms' CDS spreads in recent weeks, which can be seen in exhibits 3 through 5. Bank CDS spreads are now significantly wider than they were during the height of the financial turmoil last fall, following the Lehman bankruptcy. This is truly extraordinary in light of the government programs that have been announced or expanded in recent weeks: the FDIC guarantee program, the announcement of the Administration's stabilization plan, and several public statements that systemically important firms will not be allowed to fail during the current crisis.

The widening of CDS spreads reflects several factors. First, in the U.S., there is deep concern that the current bank stress assessment will result in actual or de facto nationalization of some institutions; this raises the possibility that debt holders as well as equity holders will take a hit. Second, financial firms with more opaque balance sheets—commercial banks, insurance companies, and some finance companies, such as GE Capital—have experienced larger increases in CDS spreads. The lack of clarity about the size of "toxic" assets and how legacy accrual assets will be marked has led to questions about their viability. In fact it's notable that the CDS spreads of the two former investment banks, which largely mark their balance sheets to market, have not widened in recent weeks, although they remain at very high levels. Third, market liquidity continues to deteriorate in nearly every market where the Fed has not intervened, including CDS. Thus, the price impact of even small CDS trades and small positions can move spreads sharply; for example, a relatively small number of investors continuing to take short positions in financial CDS may be responsible for the bulk of the price action in recent weeks. Finally, and perhaps most importantly, investors are very concerned about whether the "strings" attached to government assistance for financial institutions or markets will be changed in the future. In particular, the risk that the "rules of the game" for debt investors will be changed—

after investments have been made—has risen sharply in recent weeks. To quote a member of our Treasury Market Practices Group, "the rules coming from Washington change every other day; no one is willing to invest in anything." It's worth noting that this risk extends beyond investments in banks and is a reason that some investors are not planning to use the TALF, no matter how attractive the economics of the program may be.

In response to continued deterioration in both economic and financial conditions, central banks around the world have eased monetary policy conditions to an unprecedented degree in recent weeks. Of the G-20 central banks, eighteen have eased monetary policy since the beginning of the year. In addition, exhibit 6 shows that most of the major central banks have lowered interest rates to near zero and embarked on programs to expand their balance sheets through additional liquidity programs as well as credit-easing and quantitative-easing programs. Credit-easing programs have generally focused on purchases of commercial paper and corporate bonds outside of the U.S. In the U.S., the investment-grade corporate bond market is the rare credit market that is operating fairly normally, but this is not the case in many countries.

The local market responses to these new programs—some of which I will discuss in a moment—have generally been positive, but their relative impact globally is harder to discern. In particular, movements in major dollar FX rates (exhibit 7) do not appear to be closely related to changes in policy stance, the degree of central bank balance sheet expansion, or relative economic prospects. For example, one might expect the euro, or at least the Canadian dollar, to have appreciated relative to the U.S. dollar since the beginning of the year, given the euro area's higher policy rates and the Canadian economy's relative stability. But, in fact, the dollar has appreciated against nearly every major currency since the beginning of the year. Certainly, the dollar's position as a reserve currency and its continued status as a safe haven have contributed to its appreciation.

Last week's intervention by the Swiss National Bank to weaken the Swiss franc relative to the euro (exhibit 8) is one reflection of concern over the deflationary impact of an appreciating currency. The SNB's intervention last Thursday pushed the Swiss franc down nearly 3½ percent relative to the euro in a matter of minutes. While the SNB does not plan to engage in ongoing competitive devaluations, preventing a sharp appreciation of the currency, particularly vis-à-vis the euro, is a key component in its quantitative-easing plan to prevent deflation.

However, the United Kingdom probably wins the prize for the most aggressive quantitative-easing plan, at least in terms of its timetable. Two weeks ago, the Bank of England announced an asset-purchase program focused on commercial paper, corporate bonds, and government securities. Given the limited size of U.K. credit markets, the BOE announced that the majority of the purchases will be of government bonds, and specifically over the next three months they will purchase as much as £75 billion of gilts in the 5- to 25-year maturity range.

The planned BOE gilt purchases amount to 5 percent of U.K. GDP, nearly 12 percent of total gilts, and 18 percent of nominal gilts held by the public. To put this in some perspective, a similar-sized program in the United States, by these metrics, would entail purchases of U.S. Treasuries ranging from $585 billion up to nearly $750 billion over a three-month period.

Since the announcement, gilt yields have fallen 19, 53, and 79 basis points in the 5-, 10-, and 20-year maturities, respectively, but 2-year yields have risen 38 basis points—they are not buying 2-year gilts. As shown in exhibit 9, most of this was an announcement effect. Interestingly, the spread between the policy rate and the 10-year yield in the U.K. (exhibit 10) did not decline. In other words, long-term yields have fallen in parallel with the policy rate. Finally, private credit yields did decline with the policy action, particularly corporate bonds, which the Bank of England will also purchase. However, as noted in exhibit 11, other yields, notably swaps, fell significantly less than government yields, leading to an increase in swap spreads.

Turning now to our own asset-purchase programs, we have continued to purchase both agency MBS and debt at a steady pace. Agency debt purchases now amount to nearly $47 billion and MBS outright purchases total $219 billion, as well as an additional $69 billion in dollar rolls, which I will discuss in a moment. Exhibit 12 shows that the spreads of both agency debt and MBS to Treasury yields have been fairly stable since the last FOMC meeting. Notably, however, the conforming mortgage rate to households has continued to decline to about 5⅛ percent.

There are several reasons for this, including the introduction of our dollar roll program in early March. In the first week of March, there was a nearly 100 basis point drop in the forward financing rate for MBS relative to the MBS cash repo rate (exhibit 13). You may recall that the dollar roll market is like a "repo" market for forward delivery of agency MBS. To give an example, the March–April dollar roll transaction, which is what we're purchasing now, is a transaction that simultaneously purchases MBS for delivery in March and sells identical MBS to be delivered in April. By participating in the dollar roll market, we have lowered the cost of managing mortgage inventory and moved forward financing spreads back to levels that prevailed before last fall's turmoil.

In addition, as the refinancing wave from January abates, mortgage lenders' ability to process new mortgages has increased, and they have tended to lower rates to borrowers. Finally, retail spreads, while high, have come down because of the improved liquidity and predictability of conditions in the secondary mortgage market. Since our purchase program began in January, other investors and arbitrageurs have "followed" us into the MBS market. Not only are bid-asked spreads lower, but, as shown in exhibit 14, the daily price volatility of new MBS has declined steadily, reducing uncertainty about prices at which new mortgages can be sold.

While our MBS purchase program has helped to lower MBS spreads from the exceptional levels seen last fall, they remain very high by historical standards, as shown in exhibit 15. In contrast to the Treasury yield curve, which is shown in exhibit 16, mortgage spreads do not appear to have a predictable relationship to the business cycle. The Treasury curve, while steep, seems consistent with past episodes of economic weakness.

In anticipation of Dave's and Joe's discussion of large-scale asset purchases, exhibit 17 scales our asset purchases so far relative to upcoming new issuance. To date, the MBS program purchases are very close in size to the overall new issuance in the MBS market. However, market expectations are for a large refinancing wave during 2009 (the result of low rates and mortgage relief programs). The median estimate is for $1.8 trillion in new issuance, but estimates vary widely—from under $1 trillion to $3 trillion. For comparison, a median estimate of long-term Treasury issuance is also shown. At our current pace of purchasing, we will not keep up with expected new MBS issuance.

Finally, I want to say a few words about policy expectations and the impact of our programs. Exhibit 18 shows the results of the Desk's latest survey of dealer economists along with market-implied expectations for the future policy rate. Most dealers continue to expect policy rates to stay close to zero until at least the second quarter of 2010 and to remain below 1 percent into 2011. Market-implied expectations continue to be skewed upward, but we believe this probably reflects the high risk premiums in future Eurodollar rates rather than an accurate reading of policy expectations.

Markets directly supported by Fed programs continued to function reasonably well. However, as seen in exhibit 19, both secured and unsecured money market rates have increased modestly in recent weeks. The increase in LIBOR rates largely reflects increased credit risk of banks and is consistent with the rise in bank CDS spreads. The rise in Treasury repo rates, in contrast, reflects the large Treasury issuance and associated ample supply of Treasury collateral for lending.

Spreads on consumer-asset-backed securities have narrowed somewhat since the last FOMC meeting in anticipation of the first TALF subscription, which opened today. Our expectations for the first TALF subscription are modest, with a few billion dollars of lending against ABS, most likely backed by auto and credit card lending. Bill will be saying more about the TALF in a few minutes.

Spence will discuss various aspects of the balance sheet in more detail. However, I would like to point out in exhibit 20 the continued decline in the size of our balance sheet, as the liquidity programs shrink at a faster rate than our purchase programs increase. On a related operational note: Demand for borrowing Treasury securities from our term securities lending facility has continued to decline, with operations for both Schedule 1 and 2 collateral consistently undersubscribed. TSLF operations are very staff-intensive, so we are proposing to reduce the frequency of Schedule 2 auctions from the biweekly schedule that was implemented during the market turmoil last fall back to the original weekly schedule. We plan to maintain the overall size of the TSLF program for the present but will continue to assess whether changes may be appropriate in the future. I'll now turn it over to Bill Nelson who will discuss the TALF.

CHAIRMAN BERNANKE. Trish, does that proposal require any approval?

MS. MOSSER. It does not, according to the authorization—but I'll bow to Debbie for greater wisdom on that.

MR. FISHER. Mr. Chairman, may I ask just one question on exhibit 17?

CHAIRMAN BERNANKE. Surely.

MR. FISHER. This is calendar year 2009?

MS. MOSSER. Yes, correct.

MR. NELSON. As Trish noted, the subscription for the first TALF operation begins today. The loans requested between now and Thursday will settle on March 25, exactly four months after we first announced the program. Those months were spent canvassing potential ABS issuers and investors to determine the program design characteristics that would be most successful, evaluating the risks of the program and developing the associated controls, and working out the back-office arrangements.

Nevertheless, the size of the initial TALF subscription is going to be modest, in part because potential borrowers are uneasy using the TALF to finance ABS purchases. Potential borrowers and primary dealers have largely been unable to work out mutually acceptable customer arrangements. A particular sticking point seems to be assigning responsibility for the risk that a potential borrower is determined to be ineligible for the program at the eleventh hour, leaving the primary dealer, who is typically the underwriter, responsible for funding the issue. Investors are also reportedly concerned that participation in the program will expose them to government interference in their business, a fear apparently confirmed on Friday when it became more widely understood that recipients of 13(3) loans will be subject to tighter restrictions when hiring noncitizens. We are trying to facilitate agreements between potential borrowers and primary dealers, we are seeking to provide as much clarity as possible on the issue of hiring noncitizens, and we are addressing other issues as they arise. We continue to hope that participants will grow more comfortable with the program over time. I note that revisions to the FAQs to help clarify some issues are going on right now.

The subscription that starts today is for the TALF program as initially announced. The New York Fed will be extending three-year nonrecourse loans against newly issued triple-A-rated auto, credit card, and student loan ABS and ABS guaranteed by the Small Business Administration. The monthly operations will continue through this December unless extended by the Board. The program has a $200 billion ceiling and is supported by $20 billion in credit protection from the Treasury.

As you all know, the Board is prepared to consider increasing the size of the program up to $1 trillion, supported by up to $100 billion in credit protection from the Treasury. The expansion would entail widening the list of eligible collateral to encompass much of the universe of newly issued triple-A-rated collateralized obligations, for the most part backed by newly and recently issued loans. Staff at the Board, New York Fed, Chicago Fed, Atlanta Fed, and the Treasury have been evaluating specific asset classes for possible inclusion in the program and have been developing prospective terms and conditions. We are concentrating first on the largest asset classes and will recommend specific categories of securities for inclusion on a flow basis as we complete our reviews.

As a first step in that expansion, we recommend that the Board approve adding four categories of ABS to the list of eligible collateral, starting with the April operation. The four categories are the first to be recommended because they have relatively straightforward structures similar to those already taken, allowing us to evaluate them quickly. Although they are smaller asset classes than the consumer ABS already accepted, they are the largest among the securities that can be evaluated quickly.

The first three are the principal types of ABS that were excluded from the initial program because they are not backed by consumer loans: ABS backed by loans or leases relating to business equipment, ABS backed by leases of vehicle fleets, and ABS backed by revolving lines of credit used to finance showroom inventories. The fourth is ABS backed by the credit provided by residential mortgage servicers when homeowners miss payments. Mortgage servicers have found credit increasingly difficult and expensive to obtain. Accepting the ABS at the TALF should improve the servicers' ability to work with homeowners to prevent avoidable foreclosures.

All the assets proposed to be accepted will have maturities of three years or less, resulting in a good fit for the three-year term of the TALF loans. The proposed new collateral classes are of roughly equivalent risk to the types already accepted. After applying the recommended haircuts, which range from 8 to 13 percent, the risk to the Federal Reserve should be similar to the de minimis risk associated with the types of ABS already accepted as TALF collateral. We estimate that accepting the new categories of ABS would increase demand for TALF loans through December by $30 billion to $130 billion. If the Board approves the additions, we would release revised terms and conditions and FAQs for the program on Thursday.

We are also evaluating the other remaining major collateralized asset classes for inclusion under the TALF, for example, CMBS and non-agency RMBS. Subject to Board approval, terms and conditions for these asset classes could be announced as early as mid-April. Staff members have held extensive discussions with issuers, investors, and rating agencies about several asset categories and have narrowed down the scope of securities that we might recommend accepting. For instance, CMBS would likely include those backed by solidly underwritten existing mortgages and by mortgages that are being refinanced, and RMBS would likely include those backed by mortgages exceeding the conforming loan limit and possibly mortgages to near-prime borrowers. Because a number of the assets envisioned for the expansion are more complicated than those currently taken or thus far proposed to be taken at the TALF, staff members are planning to recommend that a collateral agent be hired to assist with underwriting and that a portfolio manager be hired to monitor the assets accepted.

Staff members are also evaluating the use of the TALF to address the legacy asset problem. The Treasury has proposed that the Federal Reserve accept at the TALF older securities that were rated triple-A when issued but that may or may not still be rated triple-A. One reason to expand the TALF to legacy assets would be to increase demand for, and hence the prices of, the eligible assets, thereby bolstering the balance sheets of financial institutions. Another reason would be to remove the eligible assets from the balance sheets of their current holders, leaving those firms with cleaner, more transparent balance sheets and an improved capacity to attract new equity from private sources. In the Treasury's proposed structure, the legacy TALF loans have five-year terms, but in other ways the facility resembles the existing TALF.

Staff members have analyzed the feasibility of the legacy TALF proposal for a few asset classes, specifically 2005- to 2008-vintage CMBS still rated triple-A and subprime and Alt-A RMBS rated triple-A at origination. Our preliminary assessment is that, for many of these securities, haircuts and other terms could be set that would adequately protect the Federal Reserve and the Treasury but would nevertheless elicit sufficient investor demand to be helpful. We have concluded, though, that it would be necessary in some cases to set haircuts on a security-by-security basis. Nevertheless, we believe that we could operate the program at sufficient scale and with sufficient speed by hiring an outside contractor.

Joe Gagnon and Dave Reifschneider will now discuss large-scale asset purchases.

CHAIRMAN BERNANKE. Before you start, let me just say that I'll give a briefing on the Treasury's plans and all of these issues after the presentations here.

MR. GAGNON.[2] Dave Reifschneider and I will review the papers on large-scale asset purchases (LSAPs) that were sent to the Committee last week. Considerable evidence indicates that policy-induced changes in the supply of long-term bonds affect bond yields. As noted in the top panel of your first exhibit, a memo circulated to the FOMC last December reviewed the economic literature on this question and

[2] Materials used by Messrs. Gagnon and Reifschneider are appended to this document (appendix 2).

reported that a Federal Reserve purchase of $500 billion of long-term Treasury securities could plausibly reduce the 10-year Treasury yield by 20 to 100 basis points. Such a purchase would also be expected to lower long-term private yields. Generally speaking, public and private long-term debt markets are closely linked, and correlations of changes in yields across these markets have historically been very high. However, in recent months these correlations have declined noticeably, raising the possibility that spillovers across markets may currently be lower than normal.

The middle panel presents evidence on the effects of recent central bank communications on bond yields. On November 25 (the first column) the Federal Reserve announced a program to purchase $600 billion of agency debt and agency MBS. On December 1 (the second column) Chairman Bernanke stated that the Federal Reserve was considering purchasing substantial quantities of long-term Treasury securities. On December 16, the FOMC stated that it stood ready to expand its purchases of agency securities and confirmed that it was considering large-scale purchases of Treasuries. On each of these occasions, the 10-year Treasury yield and long-term private yields fell substantially. On January 28, the FOMC did not indicate any change in its stance toward purchasing long-term Treasuries, whereas market participants reportedly attributed a significant probability to such a move. Long-term yields rose markedly. None of these moves appears to be attributable to economic news. As Trish mentioned, on March 5, the Bank of England announced that it plans to purchase £75 billion of mainly long-term sterling Treasury securities. The final column shows that a range of public and private long-term yields fell sharply after the Bank of England's announcement.

Household mortgage rates are quite a bit stickier than yields on traded securities, which makes them unsuitable for inclusion in the table. However, as shown in the bottom panel, most of the decline in Treasury yields since mid-November (the red line) has passed through to conforming 30-year mortgage rates (the black line). I'll now turn the presentation over to Dave.

MR. REIFSCHNEIDER. The top panel of your next exhibit reviews the basic channels through which buying agency MBS or long-term Treasury securities potentially influences the real economy. The primary mechanism is through a broad improvement in financial conditions. As Joe discussed, such purchases reduce yields on the targeted securities. In addition, the evidence suggests that these reductions spill over to yields on corporate bonds and other long-term instruments; if so, these interest rate movements should spark higher equity prices and a lower real exchange rate. In turn, household spending, business investment, and net exports should strengthen in response to lower borrowing costs, higher wealth, and greater international price competitiveness.

As illustrated in the middle panel, the stimulus from an LSAP program hinges on the extent of financial spillover. The table shows a sequence of predictions from the FRB/US model for the response of real GDP to purchasing a further $500 billion in agency MBS, assuming successively greater spillovers. As shown in line 1, even though the program is assumed to lower MBS yields and mortgage rates by 75 basis points, the boost to the level of real GDP would be small in the absence of any spillover to other financial markets. But if, as in line 2, the fall in MBS yields leads to lower corporate bond yields and other interest rates, the boost to the level of real GDP climbs to ½ percent by 2011. Expanding the spillovers yet further to the stock market (line 3) and the real exchange rate (line 4) more than doubles the amount of stimulus, to roughly 1 percent by 2011.

Other simulations, not shown here, suggest that the stimulus provided by purchases of long-term Treasury securities also is highly sensitive to the extent of financial spillover. But if such purchases were to reduce the general level of interest rates, boost equity prices, and lower the dollar, then the resultant stimulus to real activity would be only modestly lower than that provided by an MBS-only program, as indicated in the memo line of the table.

As noted in the bottom left panel, these FRB/US simulations do not capture all the potential ways in which an LSAP program could stimulate real activity. For example, lower mortgage rates could boost home prices, thereby stimulating household wealth and spending. Theoretical calculations suggest that a percentage point decline in interest rates could boost house prices as much as 15 percent; however, empirical estimates suggest that the increase might be closer to 2½ percent. In addition, lower interest rates might, via mortgage refinancing, transfer income to cash-strapped borrowers from more affluent households who are net lenders. Calculations suggest that such income transfers could provide a modest boost to consumption. As indicated by the red line in the figure to the right, when refi effects and 2½ percent higher house prices are incorporated into the FRB/US simulations, the stimulus from a $1 trillion LSAP program—evenly divided between Treasuries and MBS—rises noticeably. Effects are larger yet if house prices increase by the theoretical 15 percent (the green line).

Turning to your next exhibit, these results imply that asset purchases have the potential to compensate for the inability of conventional monetary policy to ease further. As noted to the left, the staff assumes that the federal funds rate will remain essentially at the zero bound for several years, as illustrated by the black line to the right. But unconstrained "optimal" monetary policy would call for the fed funds rate to fall even lower, were that possible (the red line). To overcome this shortfall in conventional monetary policy would require additional fiscal and unconventional monetary actions.

The middle panels illustrate how the Greenbook outlook for unemployment and inflation might change if the Committee opted to expand the current program of buying agency debt and MBS by either $500 billion (the red line) or $1 trillion (the green line). Under the smaller program, all the additional purchases are MBS; under the larger program, purchases are evenly divided between MBS and long-term Treasury securities. Both programs are assumed to generate a full range of financial spillovers but no boost to home prices or any increase in consumption from refi-related income transfers; in addition, monetary policy in both cases is set "optimally," subject to the zero lower bound constraint. As shown to the left, both programs limit the rise in the unemployment rate and cause it to fall more quickly than in the baseline (the black line). All told, the larger program fills roughly half of the gap between the staff forecast and what hypothetically would occur under unconstrained monetary policy (the blue line). As shown to the right, both programs would also mitigate the fall in inflation that is projected in the baseline.

The bullet points at the bottom offer a few caveats to this analysis. First, these results depend importantly on extensive financial spillover effects; unfortunately, empirical evidence on the size of stock market and exchange rate effects is slim. Second, gauging the economic effects of further asset purchases is quite difficult under current conditions, even if extensive financial spillovers do occur. In particular, households and firms may be reluctant to increase spending in the face of so much uncertainty, and credit constraints may limit their ability to respond to improved financial conditions; alternatively, cash-strapped households may be more responsive than normal to any boost to income provided by an LSAP program. Finally, the effectiveness of an LSAP program in stopping an unwelcome disinflation might be greater than the simulations indicate if large-scale asset purchases directly bolster the Fed's credibility. I'll now turn the presentation back to Joe.

MR. GAGNON. Exhibit 4 presents some risks that might arise from expanding LSAP programs. The most important risk, which is covered in the upper panel, is whether large asset holdings might threaten the Federal Reserve's ability in the future to achieve its monetary policy objectives. Spence Hilton will be discussing this issue in the context of the overall balance sheet of the Federal Reserve, and Brian Madigan will discuss potential new policy tools to ameliorate this risk. Large-scale holdings of marketable assets are not likely to constrain the Federal Reserve's policy stance in the future. With short-term interest rates pinned at the zero bound, asset purchases provide macroeconomic stimulus, and asset sales provide macroeconomic restraint. If it were deemed necessary to raise short-term interest rates, and holdings of long-term assets appeared to conflict with this goal, these assets could be sold off or potentially used as collateral for reserve-draining short-term operations. However, outright sales of long-term assets could lead to a financial loss; and some of the tools that could be used to drain reserves without engaging in outright sales are still under development.

Moving to the lower panel, even though fiscal revenue is not an objective of monetary policy, it may be of interest to note that LSAPs are significantly increasing the income generated by the Federal Reserve. This is because the interest rate earned on long-term assets is much greater than the marginal interest rate paid on liabilities. However, by increasing the leverage and maturity mismatch of the Federal Reserve's balance sheet, LSAPs increase the volatility of future income.

Your final exhibit discusses strategies for pursuing LSAPs. The upper panel reviews three classes of long-term security that the Federal Reserve is authorized to purchase: Treasuries, agency debt, and agency MBS. As Dave discussed, under current market conditions, we believe that MBS purchases provide a somewhat greater macroeconomic stimulus than equivalent purchases of the other two classes. This primarily reflects our view that MBS purchases will reduce private interest rates more than an equivalent volume of Treasury purchases. However, in light of the considerable uncertainty surrounding our estimates of the spillover effects across asset markets, including a significant share of Treasury securities and a modest share of agency debt in any expansion of Federal Reserve purchases may be a prudent strategy.

The lower left panel shows that the spread of mortgage rates over MBS yields rose in December with the surge of refinancing applications. These two series have been highly correlated in the past. The staff projects that current low mortgage rates and the Administration's new Making Home Affordable program are likely to create another, more sustained, surge in refinancing applications in coming weeks. As discussed in the panel to the right, there are some potential actions the Federal Reserve could take to hold down the spread of mortgage rates over MBS yields and thus enhance the macroeconomic impact of its policies. These include focusing purchases on new-production MBS to support new loans rather than seasoned loans. Another possibility, if it were determined to be consistent with the Federal Reserve's statutory authority, is selling put options on forward MBS to help mortgage originators hedge the uncertainty of their application pipelines. Perhaps even more unconventionally, the Federal Reserve could provide some assurance through its communications to the market that low mortgage rates are likely to persist for several months or more. This might reduce volatility in rates and thus reduce originator hedging costs. It might also ease the crush of homeowners trying to refinance at the same time, which strains the currently reduced capacity of mortgage originators and puts upward pressure on mortgage rates. Thank you. Nathan Sheets will now discuss foreign currency liquidity swaps.

MR. SHEETS. The staff recommends that the FOMC establish swap lines with major foreign central banks that would allow the Federal Reserve to backstop the foreign currency funding needs of U.S. institutions operating abroad. These lines would give the Federal Reserve the same capacity to act as a lender of last resort that our existing dollar swap lines provide foreign central banks.

This proposal involves two components. First, the FOMC would create a new set of swap lines with foreign central banks. These new swap lines would be designed to provide the Federal Reserve access to foreign currency liquidity. We suggest establishing such lines with the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank. We envision that the lines with the BoJ and ECB would be set at roughly $100 billion equivalent, and the lines with the BoE and the SNB would be a little less than half as large. These central banks have indicated that they are open to establishing such lines with us.

Second, the FOMC would need to create a mechanism to transfer the foreign currency received in the swap with the foreign central bank to a U.S. financial institution. We propose that you authorize use of the System Open Market Account to conduct swap transactions for this purpose. This transaction would be structured as follows. An institution that was facing severe foreign currency funding pressures would approach its Federal Reserve Bank. The Reserve Bank would then assess the financial position of the institution and the extent of the foreign currency funding need. If in the Reserve Bank's judgment a swap was appropriate, the Reserve Bank would initiate a request with the Foreign Currency Subcommittee, which would have delegated authority to approve swap draws. Requests for rollovers would also be initiated through the Reserve Bank. The Federal Reserve would swap foreign currency to a U.S. institution in exchange for dollars. The Federal Reserve would charge the institution a fee (which would be equal to the foreign central bank's policy target plus an additional charge) and would also take a 3 to 5 percent security deposit in cash. This deposit would protect against a scenario in which an institution failed to unwind the swap and in which the dollars that were received in the swap proved insufficient to extinguish our foreign currency obligation to the foreign central bank. We anticipate that such swaps would be conducted at very short tenors, primarily overnight through one week.

While we would expect a U.S. institution that faced difficulties obtaining sufficient foreign currency funding in a market abroad to turn first to the foreign central bank, we see three scenarios in which that option might not be available. First, an institution might have insufficient collateral at the foreign central bank to meet the drain on its funding and be unable to mobilize sufficient resources on its own, perhaps because the U.S. payment system was closed or because the institution was experiencing broader funding pressures. Second, the foreign central bank might choose not to lend to an institution even in the presence of acceptable collateral; this might reflect concerns about the institution's underlying financial condition or political pressures. Third, the Federal Reserve might wish to provide foreign currency funding as part of an effort, presumably coordinated with other U.S. authorities, to prevent a disorderly unwinding of an insolvent institution's balance sheet. Such lending, of course, would be done in a manner consistent with the constraints of FDICIA and other legal protocols.

As I noted at the January meeting, one major U.S. institution has shown particular vulnerabilities regarding its foreign currency funding, but we cannot rule out scenarios in which other large U.S. institutions might run into similar trouble. There is a related risk that once one U.S. institution shows vulnerability in this regard, other U.S. institutions might also then be viewed as vulnerable and that a broader foreign currency liquidity squeeze could develop. In our view, roughly half a dozen major U.S. institutions have sufficient foreign operations to be vulnerable in this respect.

These observations suggest that it would be prudent for the Federal Reserve to have the capacity to backstop the foreign currency funding needs of U.S. institutions. Establishing temporary swap lines with foreign central banks strikes us as a straightforward way to do this. While there is a good possibility that these lines would never actually be drawn on, they nevertheless would provide valuable insurance against the risk of severe stress.

One important issue that we have grappled with is whether the transaction with a U.S. financial institution should be structured as a swap using SOMA or as a foreign currency denominated loan from the discount window. After considerable deliberation and reflection, we were persuaded that the back-to-back swap structure is the way to go. The Federal Reserve traditionally conducts its foreign currency transactions out of SOMA, and there is no precedent for discount window lending in foreign currencies. A key complication with the discount window approach is getting the foreign currency from SOMA to the appropriate Reserve Bank, since only the Federal Reserve Bank of New York has accounts at foreign central banks. In addition, systems to record and manage discount window operations were not designed to track loans in foreign currencies.

By putting these swap lines in place, we would signal our intention to pursue best practice in home–host relations. We would be prepared to provide liquidity support to a U.S. institution if the foreign central bank were reluctant to step in. This could also give us increased negotiating leverage to expect foreign central banks to provide similar support to their institutions operating in the United States.

What risks do these transactions pose to the Federal Reserve? The risks attending the swap with the foreign central bank would be nil. As with our dollar liquidity swaps, there is no exchange rate or interest rate risk, because these parameters are specified upfront. And the foreign central bank is required to deposit the dollars it receives in the swap at the Federal Reserve Bank of New York, so there is no credit risk. As for the transaction with the U.S. financial institution, the Federal Reserve is protected first by the short tenor of the transaction. Second, the dollar holdings received in the swap could be used to acquire foreign currency if the institution fails to unwind the transaction. Third, if these dollars prove inadequate to repay the foreign central bank fully—either because the dollar has depreciated or because of transactions costs—the Federal Reserve will draw on the cash security deposit that the institution has provided. All told, we judge that Federal Reserve resources would be well protected against any financial risks. We also note the possibility of moral hazard—institutions may come to depend on the Federal Reserve to meet their foreign currency funding needs, rather than arranging for sufficient funding in the market or mobilizing their collateral for use at a foreign central bank. However, we have structured these swaps to minimize this risk to the extent possible. In particular, the size of the fee and the cash deposit should help ensure that the swaps are attractive only as a last resort.

Establishing these foreign currency swap lines requires FOMC approval—either directly or through delegation to the Subcommittee. We envision that approval by the full Committee would be followed by a press release within 10 days or so and, in any event, would be reported in the minutes. As such, the establishment of these lines would quickly become public knowledge. While the staff had previously feared that a public announcement could generate a negative reaction from the markets, the current weakness of confidence toward the banks may diminish this concern. Indeed, an announcement that this backstop had been put in place could even enhance confidence.

If in the Committee's judgment the announcement effects associated with these facilities would be manageable, then you could authorize these foreign currency swap lines at the meeting today. However, if you remain concerned about negative announcement effects, then we recommend that the Committee delegate authority to the Foreign Currency Subcommittee to approve these swap lines. This would enable the announcement to be deferred, pending a time when draws on the lines would actually be made. There might still be some announcement effects created by reports of an FOMC vote to delegate this authority to the Subcommittee, but it would probably not be seen as signaling the same urgency as an announcement that the facilities themselves had been established. The authority granted to the Subcommittee in this regard would be symmetric to that already delegated to the Subcommittee to negotiate dollar liquidity swap lines.

I conclude by noting that the Bank of Mexico has recently expressed interest in drawing on its dollar swap line with the Federal Reserve. We are currently working with our Mexican counterparts to better understand the situation in their economy and how they would use the dollars. These discussions are ongoing, and we will keep you posted as they proceed. Spence Hilton will now continue our presentation.

MR. HILTON.[3] Thank you. I'm going to review major changes on the Federal Reserve balance sheet since the last FOMC meeting and then summarize some long-run balance sheet analysis that was in the memo distributed last week. Last week, the Markets Group distributed its first comprehensive report on developments at the various lending facilities and purchase programs over the past intermeeting period, with a discussion of related financial market developments. That report offers much more detail than I will provide in my remarks.

Just ahead of the last FOMC meeting in late January, the total size of the balance sheet was $2.04 trillion, a bit off levels reached just ahead of the year-end. As shown in exhibit 2, over the course of that last week in January, which included the FOMC meeting dates, assets fell almost $200 billion. Declines were widespread among the various short-term lending facilities, with the steepest drop-offs in total draws on the swap lines used to fund dollar lending by foreign central banks, and in the commercial paper funding facility. As shown in exhibit 3, for the past several months now, interest rates on alternative market sources of financing available to many borrowers have been below the rates on the facilities themselves. Ongoing deleveraging of balance sheets has been cited as a factor contributing to reduced borrowing.

[3] Materials used by Mr. Hilton are appended to this document (appendix 3).

As shown in exhibits 4 through 9 on the following two pages, since early February, lending through many of the short-term liquidity facilities has declined further to one degree or another. Still, these facilities remain a crucial source of funding for some borrowers, despite rate quotes that suggest cheaper market sources of funding. A notable exception to the general trend is the term auction facility, shown in exhibit 7. The volume of propositions at the TAF auctions at the minimum bid rate of 25 basis points has increased some in recent weeks, although total propositions have remained below the total offering amounts.

As Trish noted, purchases of agency MBS and agency debt have been steadily rising. Purchases of agency MBS show up in a very lumpy way on the balance sheet, because of market practice to concentrate settlements on select dates, often with a considerable lag. Last Thursday alone, the size of the balance sheet jumped, as about $160 billion of purchase commitments settled, which now leaves the total balance sheet about unchanged from its level just ahead of the last FOMC meeting.

In coming weeks, we anticipate that recent patterns in different components of the balance sheet will continue. There is potential for increased lending through some of the short-term liquidity facilities ahead of the March quarter-end date as a possible stress point. But apart from the aforementioned increase in TAF auctions, we have not seen this so far. Meanwhile, our outright purchase programs are set to proceed on a steady upward path.

Turning to longer-term prospects for the balance sheet, the memo distributed last week presents illustrative forecasts of the balance sheet out to 2016. Projections were constructed based on certain economic assumptions, varying degrees of financial stress assumed over the next couple of years, and on policy assumptions motivated by the economic and financial conditions.

For simplicity in estimation, the various liquidity facilities, purchase programs, and other balance sheet initiatives are grouped into just a handful of broad asset categories. A baseline scenario was developed using economic conditions similar to those of the March Greenbook, and an optimistic scenario and a stress scenario were built around this case.

The methodology was kept very simple given the obvious uncertainties. But the broad contours of the asset projections are thought to be illustrative of different orders of magnitude for the size of the balance sheet that could be realized under several plausible sets of assumptions.

Projections for the balance sheet and the asset components for each of the three scenarios are shown in exhibits 10-12. In the stress case shown in the bottom panel, solid growth only takes hold in 2011, another financial market stress period is assumed to occur later this year, and there is a significant total expansion in outright purchase programs. In this case, the balance sheet peaks at $4.6 trillion in 2010, although most of the growth occurs this year.

In the outyears—2011 and beyond—in all scenarios we assume a natural runoff of assets. Short-term lending at liquidity facilities dissipates relatively quickly. TALF loans mature on schedule. And the gradual declines in outright holdings reflect either maturities or prepayments of agency mortgage-backed securities.

On the liability side of the balance sheet, apart from some assumed nominal growth in Federal Reserve note liabilities, the offset to asset movements is the level of reserve balances held by depository institutions. The reserve estimates can provide a sense of the possible size of any need either to drain reserves or to increase reserve demand should the Federal Reserve wish to target short-term interest rates—the federal funds rate—using conventional operating procedures that are typically associated with keeping excess reserve levels near zero.

Exhibit 13 shows reserve levels for all three scenarios. Peak reserve levels reach $3.7 trillion in 2010 in the stress scenario. While it is unlikely that a return to a positive interest rate target would coincide with when reserve levels were at their maximum, that occasion could come unexpectedly quickly nonetheless. The memo concludes by presenting the various options available to the Federal Reserve for accomplishing this.

From October to December 2008, excess reserves were left high, and market rates were considerably below the interest rate paid on excess reserves. There are good reasons to believe that experience may not represent the normal relation between market rates and the rate of interest paid on excess reserves. Nonetheless, policymakers might be uncomfortable at this point adopting a framework to control market rates by setting the interest rate paid on excess reserves alone while leaving excess reserves at high levels.

The Treasury's supplementary financing program or authority for the Federal Reserve to issue its own debt would provide considerable capacity to drain reserves, and little additional operational infrastructure would be needed. Traditional monetary policy tools, sales of assets and reverse RPs, could be developed to support reserve draining operations on a much larger scale than ever used in the past. These could take some time to develop to their full potential, and there is some question about the scale on which these tools could be deployed.

Finally, the broad authority to pay interest on reserves that the Federal Reserve now has could be utilized in other ways to shape demand for reserves so as to effectively reduce excess reserves to levels that would allow the Fed to target positive short-term interest rates within a more conventional operating framework. Here, too, some period of time would be needed to develop an effective operating framework using interest-on-reserves authority. Now I'll turn it over to Brian to conclude.

MR. MADIGAN. As Spence Hilton noted, it could be very useful to have an additional tool for draining substantial volumes of reserves from the banking system and shrinking the monetary base. Either the issuance of Fed bills or an enhanced supplementary financing program run by the Treasury on behalf of the Federal Reserve could be particularly helpful. The staff has drafted legislative language that would authorize these tools. Because the Treasury would have a substantial interest in such programs, and because we would need the Treasury's support in advancing such legislation, we have been discussing this subject with the Treasury. Our presumption is that we would not seek legislation both for Fed bills and for an enhanced SFP. Rather, we and the Treasury together would raise both possibilities with the relevant congressional committees to discuss the substance and the political prospects for each. On the basis of those discussions, one approach or the other would be advanced.

To give adequate assurance to the Federal Reserve and to the markets that these tools will provide the capability to tighten monetary policy as necessary and when necessary, the tools would have to be effectively under the Federal Reserve's control. Two possible constraints are of particular concern: the public debt ceiling, and possible interference by a future Treasury. To ensure that a binding debt ceiling does not disrupt the conduct of monetary policy, Fed bills or Treasury bills issued under an enhanced SFP program would have to be excluded from the debt ceiling. And to ensure that a future Treasury could not block the implementation of appropriate monetary policy, the Federal Reserve either will need to be able to issue its own obligations as it sees fit to carry out its statutory mandate, or it will need to be able to direct the Treasury to do so as its proxy.

However, the Congress may see the exclusion of Fed bills or SFP obligations from the debt ceiling as an unwarranted dilution of the congressional responsibility to appropriate government monies and to authorize the issuance of federal debt. And we recognize that the Treasury is concerned about the potential for issuance of such securities to interfere with the Treasury's responsibility for managing the public debt.

Draft legislation prepared by the staff would assign the primary responsibility within the Federal Reserve for the issuance of Fed bills or SFP bills to the Federal Open Market Committee. This seems appropriate because the main purpose of the tool, as we see it, is to ensure the capability of the FOMC to tighten monetary policy when appropriate. We see Fed bills as a tool on the liabilities side of the Federal Reserve's balance sheet that would essentially be symmetric with our asset-side open market operations.

The legislation should also address several other key issues. In that regard, we have included the following specific elements in the draft legislation we sent to the Treasury:

- First, Fed bills would be full faith and credit obligations of the United States in order to maximize their acceptability to investors, to make them as close substitutes as possible for Treasury securities, and to minimize the interest expense of such obligations.

- Second, for similar reasons, Fed bills should not be subject to state and local income taxes.

- Third, the Treasury has suggested a statutory maximum maturity of Fed bills in order to limit interference with Treasury debt management. We have recommended a maximum maturity of one year. Treasury staff members prefer a shorter maximum term.

- Finally, we have recommended that the Fed not be required to notify the Treasury a fixed number of days before issuing Fed bills or scheduling issuance of SFP bills, but rather that the legislation indicate qualitatively that issuance of Fed bills or SFP bills should minimize interference with the conduct of the Treasury's regular debt management responsibilities.

As President Plosser and others have noted, there are pros and cons to the Fed bills and expanded SFP proposals. And even with the support of the Administration, the political prospects for such legislation are not clear at this stage. It is possible that the Federal Reserve may need to accept some changes to the draft legislation to obtain passage. One possible change that might help make the program acceptable to all interested parties would be a sunset provision under which the authority to issue such obligations expires after, say, five years.

CHAIRMAN BERNANKE. Thank you for a very thorough set of reports. Out of those reports, there was, I believe, one action item we'll come back to—besides ratifying the open market operations—which is the swap proposal that Nathan discussed. But let's open now for questions to any of the staff. President Fisher.

MR. FISHER. If I can go back to the beginning, or almost the beginning, and ask some questions about the TALF in terms of lessons learned—I understand that Barclays has put together a pass-through certificate program that seems to have some acceptance, at least in the hedge fund community. Could you bring us up to date on that and what it means in terms of the functioning of the TALF? Does it facilitate it? Does it make it more complicated? Did you expect it? And is it something that's going forward?

MR. NELSON. I'll do the best I can. First of all, this is something that we've been allowing the private sector to develop. It's not like some of these other instances where we've worked with the private sector to develop special purpose vehicles like the MMIFF. These are private sector efforts. These things first came up in discussions when we were trying to think of ways to make the program useful for real money investors. Part of the challenge in the TALF is that the objective is to encourage an investor class that normally hasn't invested in asset-backed securities to move into that space, namely, leveraged investors. Traditionally, asset-backed securities have been held by real money investors, like pension funds and insurance companies. So we were trying to think of ways that the program could be made more attractive for those investors. One way to do that would be to have a special purpose vehicle purchase the asset-backed securities and take the loan and raise the haircut part of that transaction by issuing equity. That equity could conceivably be a tradable security which could be invested in by real money investors.

When we looked at that a month or so ago, it didn't necessarily seem as if it was going to be successful, though my understanding is that it has gotten more momentum in recent weeks. In particular, the one thing that I think would really make it take off would be if those equity tranches could be rated by the credit rating agencies, and I am not sure where that effort stands.

Another reason these special purpose vehicles came up was our requirement that we only lend to U.S. entities. Many hedge funds are actually foreign entities, but we viewed it as acceptable (and I may not get this exactly right) if there was a U.S. arm of that entity with a U.S. operation—an actual person, a manager there—that would be a U.S. entity that we could lend to. So to some extent there was an effort to set up vehicles along those lines. Then, lastly, there has been interest in potentially insulating the financial institution from some things like the H-1B visa issue that I just mentioned or some other consequences of the program itself. I don't think any of these things are likely to be moving forward for this subscription, but rather they are continuing to be reviewed by the private sector and being developed.

MR. FISHER. But just so I understand this, let's assume that this proceeds. I perceive it as having significant momentum in the investment community. The SPVs would be performing basically a clearing function. They create a CUSIP-identified tradable security. The people that could buy those securities would not have to worry about all the ramifications of the TARP in terms of the political ramifications that seem to be spooking the hedge fund and other communities—is that correct?

MR. NELSON. Well, it's not clear, and I think that's the rub right now. The folks that are concerned about compliance, I think, have written our regulations to say we will look through such structures to the ownership entity to make sure that the compliance protocols have been followed. On the other hand, when we say whom we're actually lending to, I think that language has been more along the lines of—in particular, say, for whether or not it's a U.S. entity—"it's okay to set up one of these entities." And because those two efforts are not yet completely lined up, that's why I believe these things are still under development and there are still open questions that need to be answered before it's clear that they will be able to go forward.

MR. FISHER. Would you say that this search for new engineering is a function of the discomfort of the hedge fund community and the investment community with the TALF, given the TARP restrictions that are placed on top? I'm just trying to understand where this came from.

MR. NELSON. I think it came up for several of these reasons. That's certainly one of them.

MR. FISHER. But I can see where this could also certainly be suspicious politically. I'm just trying to understand how this TALF thing is going to unfold, because there seems to be some momentum in this direction, at least from the standpoint of Simpson Thacher, who are the lawyers behind it. Forget about the dealer relationship to the Fed—it's between the dealers and the investment community where there's still this odd linkage here. It's becoming increasingly complicated.

VICE CHAIRMAN DUDLEY. In terms of the order, I think the SPV was initially a device so that real money investors could get involved in the TALF. But then, as all the political considerations became more severe over the last couple of weeks, people thought, "well, hey, we could also use it for this second purpose—to provide some distance from the government and the TARP restrictions." But the original impetus was for real money accounts.

MR. FISHER. One of the reasons I'm raising it is that I think we've got to be careful not to get the cart before the horse here, and in the presentation, I realized, just looking down the path, we're talking about legacy assets. We're going to have to get the first setup correct before we go further down the path. At least I would recommend that to the Committee.

MR. NELSON. Yes, and we have remained very focused on that.

CHAIRMAN BERNANKE. That's very good advice. President Hoenig.

MR. HOENIG. Just a clarifying question. Can you quickly give me a matrix that says what TALF issuance we're talking about and how much, starting with the original \$200 billion and then the various add-ons, up to the total—just so I understand what we're talking about in each issuance or expansion of the TALF program?

MR. NELSON. At this time, our estimate is that, over the life of the program, the collateral that was approved initially—that's beginning today, and that's consumer ABS and

Small Business Administration ABS—that should amount, we think, to $100 billion. So we won't make it to $200 billion unless the program is expanded. The additional asset classes that we've proposed to the Board for inclusion, which would largely complete the asset-backed securities space, as well as mortgage servicer advances, would add another $30 billion. So those combined would still not bring us to $200 billion. The rest of the analysis is really very tentative. So our effort is to be as inclusive as possible, and we're looking at the major collateralized high-quality asset classes.

MR. HOENIG. This would go all the way to legacy commercial-mortgage-backed securities?

MR. NELSON. No. At this point I was thinking in terms of newly issued securities.

MR. HOENIG. Newly issued. Okay.

MR. NELSON. The range that the teams have provided goes from $50 to $500 billion depending on a number of issues, including whether or not warehouse financing is available, whether or not investors can grow comfortable with the rather extreme mismatch between the maturity of the TALF loans and the maturity of the underlying securities. So that last step conceivably would still not take us to the $1 trillion. But it is, I must say, very uncertain because they're still just scoping out those securities. Now, legacy assets would then add on to that.

MR. HOENIG. That's helpful. Thank you.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. I have several questions and a comment at the end. First, a compliment to the New York staff: I thought that the material distributed ahead of time outlining all of the asset programs was very informative, very well laid out, and very succinct. My compliments to you on that work.

I have a question for Ms. Mosser. This has to do with the comparison between a program of agency and MBS purchases like we've been pursuing and what a program of U.S. Treasury purchases would look like. My understanding is that you plan your announcements and the size of your purchases a little bit in advance. Would we get any more flexibility by using Treasuries rather than MBS or are they pretty much the same? Would you get a little more flexibility to vary the size of the purchases week to week?

MS. MOSSER. It's a different kind of flexibility. In the mortgage-backed securities program, although we do buy across the curve in all coupons, we are focused very much on the TBA, or the forward delivery market, which trades weeks and months in advance of delivery. If that's the market that you're trading and buying in, you have a huge amount of flexibility from day to day to respond to prices in that market and just to buy more forward contracts or fewer or do a dollar roll and offset some of those if you have to. But then on delivery day you get, as we did last week, $160 billion of securities. So in that sense of flexibility—can you respond daily to market events, for example, tighter spreads, narrower spreads?—it's very easy to do. That's a very deep, liquid market; it's a very homogeneous market, even though what you get delivered is fairly heterogeneous. In the Treasury market, it's a different kind of flexibility. We can buy in various parts of the Treasury curve. In the mortgage market, it's very hard to move around the mortgage yield curve easily, but it's easy to do that in the Treasury curve. So I'm not quite sure what you mean by flexibility. If you mean sheer quantity, they're probably about the same.

MR. LACKER. Let me follow up. When you buy Treasuries, when you do a coupon pass, do you settle the same day or next day?

MS. MOSSER. Next day.

MR. LACKER. Next day. These MBS and agency securities—they settle once a month?

MS. MOSSER. Several times a month, but yes. It depends on the type of security, but yes, basically once a month.

MR. LACKER. I see. So if I looked at it from the point of view of what happens to bank reserves, it's just a once-a-month hit.

MS. MOSSER. Well, it's once a month per type of security. So there are actually several days a month.

MR. LACKER. I see. So it's staggered.

MS. MOSSER. But it's very periodic and very, very predictable when they're going to settle.

MR. LACKER. Right. For Spence, I was very interested in the forecast of the balance sheet, and we've been talking about that for the last couple of meetings. You have the forecast going up in a straight line to the end of the year, and I take it that's just because you forecasted the end-of-year balance sheet, right?

MR. HILTON. Yes.

MR. LACKER. Do you have a sense of what it's going to do between now and the next meeting? Have you done that exercise?

MR. HILTON. Not really systematically in the way this is put together. Our sense, though, between now and the next meeting, is that what we're going to be buying is fairly predictable. I'm not sure what the settlement dates are, but if the settlement dates were smooth, we would be expanding pretty much at the same pace. I'd expect the liquidity facilities, though, to hang out where they are and maybe, on balance, come off a little bit further, barring some sort of a stress period. So I would anticipate that we're predominantly in an expansion phase right now.

MR. LACKER. So, in principle, if I asked you to write down numerically, as you did for the end of the year, a forecast for the monetary base at the next meeting, say, you could do that?

MR. HILTON. Yeah—with a nice confidence interval.

MR. LACKER. Subject to the usual caveats. [Laughter] A question for Mr. Nelson. You named a bunch of asset categories that you're considering for the TALF. What criteria are you using to pick those asset classes? I mean, what sort of principle or objective is driving those choices?

MR. NELSON. Our objective is to take as broad a set of assets as possible, consistent with choosing ones that can be taken efficiently, that we can figure out ways to take with acceptable risk to the Federal Reserve System and to the government.

MR. LACKER. But just ABS, right?

MR. NELSON. Well, all collateralized assets.

MR. LACKER. Oh, collateralized assets. Okay.

MR. NELSON. But of relatively simple, straightforward structures, so that we can manage and understand the risk—but, nevertheless, as wide a group as possible. We're just on the way to that at this stage.

MR. LACKER. Okay. I'm just curious. It's sort of striking. The original impetus involved certain securitization markets, where I thought we were motivated by particular observations that suggested distress. Are the problems we see in markets widespread across securitization?

CHAIRMAN BERNANKE. Separate from conforming mortgage markets, where we have a different program, all other ABS markets, to my knowledge, are pretty much shut down.

MR. LACKER. And then a question for Mr. Sheets. You talked about moral hazard. This institution that you talked about—or any institution in this category—presumably has overseas operations in which they have liquid liabilities and less liquid assets?

MR. SHEETS. Correct.

MR. LACKER. And I think we talked about this at the last meeting, right? That's where you first briefed us on this.

MR. SHEETS. Right.

MR. LACKER. So, over that period—it's been almost two months now—could an institution like that have reduced its vulnerability to the possibility of having a funding problem in another currency? Could it have let its deposits run off, maybe sell the assets upstream to the parent? And if that's true, then wouldn't the presence of this program influence an institution's incentives to take steps in the weeks ahead to protect against potential funding problems?

MR. SHEETS. That's obviously a profoundly important question, and let me just address it at several different levels. In terms of the specifics of that particular institution, one of the things that's been a challenge for us is to get good data—for a range of such institutions. So it's hard to state categorically what this institution or other institutions have done with their balance sheets over the last couple of months.

But I do think it's very telling that in mid-February the stresses on the financial sector and the banks were, if anything, even more pronounced than they were in mid-January. Yet we didn't hear the same kinds of reports, and we didn't observe the same stresses as in January, which may very well point to exactly the phenomenon that you're indicating here—that the institution did things to reduce its vulnerability to these sorts of pressures. So I think that is going on, absolutely.

That raises the question of whether this sort of a facility would dull those sorts of incentives. As I said in my remarks, we've done everything we possibly can to structure this in such a way that it would be attractive to an institution only as a very last resort—the fees that we're charging, the additional collateral, and so on and so forth. Nevertheless, we can imagine instances where the drain on the foreign currency funding might be very intense, and even a well-managed institution might have problems raising sufficient collateral and resources on its own. We can also imagine instances where the foreign central bank is not enthusiastic about lending against even good collateral for an institution. The Bank of Japan, in particular, remembers an instance from the late '90s when the Federal Reserve was not enthusiastic about lending to Japanese institutions because of what were perceived as political pressures in the United States, and they've asked us to consider the possibility that something similar might happen to them, and they wouldn't be able to lend to U.S. institutions. So notwithstanding the moral hazard risk, which, as I said, we've done everything we can in this proposal to attenuate, we still see that there would be plausible states of nature where it would be prudent to have these foreign currency swap lines in place.

MR. LACKER. If I could just follow up, Mr. Chairman, I take it that the institutions, the half dozen you referred to, are bank holding companies in the United States.

MR. SHEETS. Yes.

MR. LACKER. What steps have we taken—particularly regarding the one you referred to as being especially vulnerable—to encourage them to reduce their vulnerability to funding risks in foreign currencies?

MR. SHEETS. I would have to defer to the regulators. I don't know if Trish has some information.

MS. MOSSER. I also would defer to the supervisors on this. But we have had conversations with the supervisory teams of a couple of these institutions (not just the one) since we decided that it was worth investigating, and nearly all of them are deleveraging abroad as they are deleveraging here and attempting to reduce their liquidity risk. I think that eliminating that risk in a really short period of time is probably unrealistic, considering the size and scope of operations, including very traditional banking operations—which, we all know, are subject to runs—that several of these institutions have in many countries. And many of those countries do not have, for example, the deposit insurance schemes that the United States does, which means the institutions are more vulnerable there. I think the possibility of completely shutting down and eliminating the risk in a short period of time is probably unrealistic, although movement in that direction is a good idea.

MR. LACKER. Is it our sense that they're doing all they could?

MS. MOSSER. My impression is that they are moving in that direction. I wouldn't superimpose my views over the supervisors' about whether they're doing everything they can.

MS. BAILEY. I'm not quite sure how to frame "all they can." I think the supervisors—particularly with the company that's probably the most international of all—have clearly gone through their funding. It has set up appropriate funding mechanisms within those countries where they are being looked at, and they have taken good significant steps to try to address some of the vulnerabilities. They've had outreach meetings with the different central banks. So during the last year, they have actually been taking a lot of aggressive steps to try to minimize the vulnerability associated with that. But some of the organizations are big purchasers in foreign currencies. We just can't shut that down that quickly, nor do we expect to. It's just not a believable strategy for that funding mechanism. But they're looking more broadly both at the U.S. and abroad.

MR. LACKER. I guess I'm looking not for shutting them down, but for measures that could reduce the funding vulnerability, the liability–asset mismatch that gives rise to the risk.

MS. BAILEY. They absolutely have been not only looking at those strategies, but also executing those strategies.

MR. LACKER. Thank you. Thank you, Mr. Chairman

CHAIRMAN BERNANKE. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. A procedural question. We had seven presentations. Are we just going to do questions for now? Are we going to have an opportunity to do a sort of go-around?

CHAIRMAN BERNANKE. There will be a discussion period as well. This is just for questions.

MR. PLOSSER. I just wanted to go by the rules. On the large-scale asset purchases, I have a couple of questions about some of the underlying assumptions. I was struck by the fact that the assumption was that, under an MBS purchase of $500 billion, the rates on corporates and Treasuries also go down. But the net effect of that, given the assumptions you made, was that corporate spreads rise by 20 basis points, whereas under a Treasury bill purchase, corporate spreads fall by 20 basis points. I'm puzzled about what model generates that kind of differential effect, and how much that might be driving some of the stimulation results that you've got. I'm a little puzzled about what drives—well, I know what drives it; the numbers you put down drove it—but I didn't know whether you thought that was internally consistent or whether there were economic mechanisms that you thought that was consistent with.

The second question I had was about the assumptions about the elasticities. You've got a mortgage-backed security market that's $7 or $8 trillion, somewhere in that neighborhood, you've got a $500 billion purchase—so that's a little less than 10 percent of the marketplace—and you get a 75 basis point effect, whereas for long-term Treasuries you've got less than $2 trillion total and you do a $500 billion operation, and you only get a 30 or 50 basis point effect. So there you're participating in almost a third of the market, and in the other case only about 10 percent. It may be true that those are the right elasticities, but I'm wondering where those came from. To get any effect in some of this stuff, you've got to have some sort of market segmentation going on so that you can play the yield curve game a little bit.

The other question on that topic was related to President Lacker's question. The presumption of these programs, particularly the mortgage-backed purchases, is that there's something amiss in the markets, that we're trying to fix some intermediation problems, or there are some dysfunctions in those markets. And yet it seemed to me that, as you expanded the so-called spillover effects and they got bigger and bigger and bigger, it goes against the very presumption of why you wanted to be in these markets in the first place—to try to promote intermediation and liquidity. So I didn't know how these two assumptions connected or reconciled with one another—how you could get both large spillover effects and maintain the presumption that these markets were dysfunctional. I wasn't quite sure how those two pieces fit together.

On the swaps, following President Lacker's comments, I had some of the same questions. It seems to me that you offered three reasons why these swaps might be needed. One was this issue of not having enough collateral in the foreign country for the central bank to do the lending it wanted to do, and the second reason was the foreign central bank maybe wouldn't accept the

U.S. bank's collateral. But the other reasons really had to do with the solvency of that institution. It seems to me that, from an operational point of view, if a bank is insolvent, it's not clear we ought to be lending to them in the first place, so I'm not sure that's a reason to be in this business. And given that it only applies to perhaps four or five banks, if it's really a liquidity problem, it seems to me that doing this through the discount window is a much more natural way to think about what it is we're doing and the problem we're trying to solve. You offered some concerns about how difficult that would be. I guess none of those seemed insurmountable to me. And the fact of the matter is that we would probably be doing most of this lending out of New York anyway, so it's not as if you're going to have to worry about lots of the Reserve Banks necessarily having to get foreign currency. It just seemed to me that it might be a better way to go because (a) we do not want to lend to insolvent institutions and (b) the discount window seems appropriate for exactly that liquidity problem rather than designing another facility.

The last question I have is about the announcement effects. I worry that this is going to be interpreted by the markets as a veiled or not-so-veiled attempt to support one institution. I think the markets will see through that very quickly. I don't know how to mitigate that if we decide to do it. It could be viewed as a less than transparent effort on the part of this institution to support a particular institution, and I think that, in turn, may damage our credibility and damage our reputation in the marketplace. I think if an institution is in trouble and we make the decision to help it in some way, then we ought to do it on its merits and not try to "back door" that solution through another mechanism. Thank you.

MR. GAGNON. If I could start with the first couple of questions, I think our views have been evolving somewhat as we've been working on this. When I looked at the literature while I was working on the December memo, there wasn't an agreed-upon way to normalize or scale purchases like this. So what I did at the time was to take the most common approach, which was to look at the total size of the market across all maturities—and that was about $5 trillion for U.S. Treasuries. The idea was to consider a purchase over a broad range of maturities at the long end, say, maturities of more than three years, but I didn't fine-tune it to segments or look at just the long end per se. You might want to do that.

MR. PLOSSER. If you want to get a lot of response, it seems to me you've got to think about it as a segmented market of some kind.

MR. GAGNON. I have been moving in the direction that you're thinking of about whether there are differential effects, but there's just not an accepted view in the literature on how to do this—it isn't even really discussed very much. On the MBS market, if you take MBS and agency debt together and then net out the agency holdings of MBS, you get about $7 trillion. But it's not clear you should merge them in that way; if they were each treated separately, as two separate markets—agencies and MBS—those would each be smaller. I wasn't sure, I threw up my hands and said, "well, it's roughly the same size." That's how we got the $500 billion treated that way in each market. Since we wrote the December memo, Treasury debt has gone up a lot; and it's noted in our latest memo that, in fact, the range we get, which is quite large—20 to 100 basis points—would need to be shifted down some, given that about $1 trillion of Treasuries have been issued just since we wrote the earlier memo. So the ground is shifting beneath our feet. And I didn't really pay attention to that until quite late in the process. But these ranges are quite large. We just don't know within a big range where the answer is.

One final thing before I let Dave jump in is, given all of that, we still thought purchases of MBS, especially initially, would have a bigger effect on MBS yields than purchases of Treasuries would have on Treasury yields, because the MBS market was strained and spreads were unusually high. We thought we could push the spreads down. And they're still on the high side historically, so there is still, I think, some scope to do that. And if you keep going down that road, presumably, the scope to do further improvements of spreads does diminish. In terms of your question, we have the effect of MBS purchases lowering the corporate spread to Treasuries. Dave, is that right? And we have Treasury purchases raising the corporate spread.

MR. REIFSCHNEIDER. Yes.

MR. GAGNON. So, again, we thought buying private assets would reduce private spreads generally to some extent, whereas buying Treasuries, which are the favored asset, actually might widen spreads.

MR. PLOSSER. Why is that? Because the market would anticipate that we may go in and buy those other private assets, such as corporate bonds?

MR. GAGNON. The thought was that the Treasury purchases would be taking a safe haven out of the market and then that would lower Treasury yields more than other assets, so it would widen spreads. For MBS purchases, it seemed to us that just generally you're helping remove private sector assets, so it should help all private sector assets relative to Treasuries.

MR. PLOSSER. It's just a funny distortion, it seems to me.

MR. REIFSCHNEIDER. There is a funny distortion, but I think in some sense it can almost be a distraction. One of the problems we had was—and we talked about this when we wrote this down—whether we should stick with this bigger own-yield effect on MBS than on Treasuries. And our sense is—I hope it came out in the memos—we don't really know what the direct own-yield effects will be. We had sort of an experiment on the first $500 billion—what's the second $500 billion going to be? So there's this issue of scale that could change quite a bit as you go through time. Whether there are spillover effects from MBS into Treasuries or into high-grade corporates—there's a huge uncertainty about that.

And for that reason, I think you shouldn't interpret the model simulation evidence—to the extent it is evidence—as suggesting, "oh, MBS is the way to go because you get a much bigger bang for your buck on that than you would for Treasuries." I don't think that's the way to interpret it at all. I think the way to interpret the model simulation results is that buying large amounts of these securities, whether it's Treasuries or MBS, has at least a fighting chance of bringing down the general level of long-term interest rates. And if you can do that, and if that spills over into the stock market, the exchange rate, that sort of thing, then you potentially get a major stimulus to the real economy.

If the program just becomes narrow on one particular market—suppose you just drive down MBS—then you might not get very much for that. Maybe you would get a little bit more—maybe—in the case of MBS, because then you're affecting mortgage rates and refi effects and house prices—maybe—but it's not really where the big payoff comes from, at least as far as these particular stimulations go. The big payoff comes from general reductions in the level of all long-term rates, and then these other things follow. So we thought that was important. That's really the main way to think about the program.

MR. PLOSSER. What I was trying to get at was this issue that the payoff is lowering all long-term interest rates. And your assumption is that you've got this differential spread effect. Is that driving this notion that buying MBS might be differentially better? Why wouldn't you just buy Treasuries and get the spillover?

MR. REIFSCHNEIDER. Right. Joe and I may part company here, but I don't think there's a strong case that buying MBS is definitely more advantageous than Treasuries. I think we just don't know enough about what size the effect is. There are reasons to think that it might be bigger in the case of MBS, but it's very difficult to say.

MR. GAGNON. I would just note that MBS yields have come down a lot more than Treasury yields over this period, so that would support our view. Whether that would continue for the next $500 billion or the $500 billion after that—maybe not.

MR. PLOSSER. Well, that really prompts the other question: What's the appropriate way to think about the scales of these operations? How do we think about diminishing returns in these markets?

MR. REIFSCHNEIDER. It's anyone's guess, and it's also the case, as Joe said in his remarks, that the more you focus on one market, the more you're not really taking a diverse strategy on something in which it's not quite clear how this is going to play out. Also, the more you focus on one market, the more the question arises at some point: Do you just decouple that market from everything else?

I think the second question that you raised had to do with this issue of fixing market dysfunction and whether that was a potential conflict if you were getting this better economy. Although we thought of the bigger MBS effect as maybe having potentially a somewhat bigger bang for the buck, because it might be helping to ease certain market strains, we thought in all cases that the reason for this policy is not to deal with the strains of financial markets per se. It may have that effect by strengthening the economy and so on and so forth—an indirect effect—but the main purpose was to get around the zero bound by driving down the average level of long-term interest rates and getting other general financial conditions to improve.

CHAIRMAN BERNANKE. Trish, did you have a comment?

MS. MOSSER. Yes, I had a comment about how long this goes on. It seems—both from our MBS purchase program and from the U.K.'s announcement—that a huge amount of the interest rate effect happens on announcement, not on execution. It doesn't grow over time as the purchases get bigger and bigger and bigger. Boom—the rates fall. Discerning spread changes from the purchase levels is very tricky business, and so is the macro effect—I wouldn't venture there. But that announcement effect happens because of the assumption that the central banks are going to keep buying for a while, not that they're just going to do it for a month or two and then stop the program and go away. I am fairly certain that in the U.S. we'll see that reaction in mortgage spreads—if the determination was made to stop in July, the forward rates in July would pop right up and we'd be back to approximately where we were in January. There's a question already arising about what the Bank of England is going to do after three months.

MR. PLOSSER. Well, uncertainty about our policies really creates a lot of problems.

MS. MOSSER. Yes.

CHAIRMAN BERNANKE. Okay. President Evans.

MR. EVANS. Thank you, Mr. Chairman. I'd like to congratulate you on being a tough taskmaster, with having us sit and listen to an hour's worth of briefings without any questions. I had seven, but I'm down to three now. [Laughter] And I'll be jumping around, too, because of that. I'd like to ask a question of Dave Reifschneider first, having to do with exhibit 3 on the inflation forecast under large-scale asset purchases. Let me mention at the outset that I'll reveal later on in this meeting that I'm not overly concerned about inflation, but having seen this chart, I'm suspicious of this, and it's in the way that the analysis is done. As I read the Bluebook, it seems that the unconstrained optimal policy has inflation rising because inflation expectations rise, and you have inflation expectations depend on errors in the Taylor rule, as I understand it.

So I'm guessing that the model is seeing very accommodative monetary policy and translating that into increases in inflation expectations, and that's why inflation is up. Now, I'm going to guess that you do not have that same effect in these other forecasts.

MR. REIFSCHNEIDER. Yes.

MR. EVANS. And that makes no sense to me because the whole point is to replicate an accommodative monetary policy. So I would have come up with some translation of how accommodative and unusual this is and tried to feed this into it. Success would be when you come up with a nontraditional policy that matches that the unconstrained outcome, because that's what we're trying to do with the optimal policy. My guess is that, if you went back and were successful, this inflation outlook would have more overshooting, right? Over 2 percent. So I don't think we can rely too much on that chart.

MR. REIFSCHNEIDER. I agree 100 percent. When we were doing the Bluebook box, we had this discussion. We saw that this is a real limitation of the model—that in one case it gets to learn off of what the fed funds rate is doing relative to the rest of the economy, and in the other case it doesn't know how to learn off of these large-scale asset purchases. So we said, what are we going to do about it? Do we just write something down? Do we try to come up with the correct fix? And the answer was, we had ideas for how to fix it correctly, but there is no way we're going to figure out the right way to do this in a week. So you are exactly correct.

MR. EVANS. I like the model analysis. I think it's very useful, and I think this is just a limitation, and that's how everybody should interpret it, because you're doing a great job on the unemployment rate here. That sort of tips you off.

Let me jump to the balance sheet scenarios, because I looked at those scenarios, but didn't see one that, in light of disinflation risk, I would like to see. If it were costly to have one more, I would drop one of the others instead. The ones that I'd like to see are where the Committee finds itself in a position where we need to raise rates, but we have a lot of sticky assets on our balance sheet, we're not quite sure how to address that, and we don't get legislative relief. While I do not put a high probability on this scenario, I think it's important to understand it. What if inflation expectations rose? I think it would have to be an exogenous increase—something that is not currently imbedded in my thinking and in the model analysis here—but, what if? Certainly a lot of people are out there looking at our balance sheet—I think incorrectly—but they're looking at it and saying "something's going to get out of hand." So if we could see a scenario like that, including how we would have to grapple with balancing the conflicts, it would be very informative. That's more of a suggestion.

Finally, I have a relatively elementary question about the TALF: What is the value-added of the investor in the middle in this entire transaction? We're bringing hedge funds to the table, and I've thought, well, they're going to help with price discovery to make sure that this issuance is really right, but I don't know that that's really a strong role. There's a lot of private capital on the sidelines—according to what everybody tells us—and they're going to bring a very small part of it to the transaction. But what they are demanding—I hear from everybody I talk to—are very high levered rates of return, which hedge funds are typically associated with delivering. This is going to be in relatively low-risk transactions—triple-A. We're not expecting to lose on them, but we could.

But what does this mean? We're hoping this will kick-start a secondary market. It's that kick start—I don't know where that comes from. There's capital on the sidelines. What will bring it to the table? I would guess that they would start by looking at this and saying, "Well, the safest investment has 20 percent rates of return. So from here on out the risk curve, the rates should be higher." I'm already hearing from a lot of contacts that this is very expensive, that they have to deliver this, and they're not sure if they are going to participate very much.

Is the risk–return frontier in some sense being moved up by this program? Will competition really bring these returns down? That's what we always think, but I don't know where competition is going to come from, because it's on the sidelines. I really have to understand why it's on the sidelines and why it will now be forthcoming.

CHAIRMAN BERNANKE. Do you think there's an aggregation externality in liquidity—getting activity going again so that people issue and so on? That would be one reason why it would stimulate additional activity.

MR. EVANS. Yeah. It seems like a hope at the moment. And I'm not opposed to hoping a lot. [Laughter]

CHAIRMAN BERNANKE. I think that's our best tool right now. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. Back to Mr. Sheets. I've followed a few international liquidity crises over the years, and they often start in strange places, and my question is: Do we need to think about exotic currencies—currencies in which there is not really a dollar swap or foreign currency swap market that could provide funding, but where the institution in mind may have pretty sizable book? The idea would be to try to nip something in the bud before it gets to a hard currency.

MR. SHEETS. This is an issue I've actually spent a fair amount of time thinking about. Absolutely, it's a concern. For instance, one of these major institutions has a fair amount of exposure to some of the secondary and tertiary emerging Asian currencies. But the staff simply didn't feel comfortable recommending the establishment of, say, 30 or 40 or 50 swap lines with foreign central banks. We see this proposal as providing a foreign currency backstop for these institutions—a safety net of some stripe—which, hopefully, between giving them access to yen or euro or whatever the case may be, and their dollar holdings, would enable them to respond to stresses in some of these secondary markets. I note that there is a risk. We don't see it as being significant, but there's a risk that these institutions might mobilize collateral from some of these markets where there is liquidity support into some of these secondary markets; hence becoming more dependent on our liquidity facilities. But we didn't see any way around leaving some residual liquidity risk. It's a thorny, thorny issue.

Mr. Chairman, President Plosser asked several questions about the swap lines. Could I go ahead and answer those?

CHAIRMAN BERNANKE. Sure.

MR. PLOSSER. Thank you.

MR. SHEETS. First of all, let me underscore that we see these lines as being focused primarily and exclusively on liquidity. What we have in mind in that third case is that an institution has been declared dead and is out of business; we're suggesting in that sort of a scenario, it might be useful for the authorities to have access to foreign currency liquidity in the process of winding up the balance sheet and ensuring an orderly wrap-up, consistent with all of the legal protocols and so on. We're not advocating a loan to an institution that's actually insolvent as if it were a solvent institution.

Your second question was on the discount window versus the SOMA approach or the swap approach. As I said in my remarks, it's something we spent a lot of time deliberating. On the one hand, there are certain aspects of this that have a discount window flavor. On the other hand, there's no history of the discount window doing foreign currency operations.

MR. PLOSSER. We've done a lot of things without much history. [Laughter]

MR. SHEETS. On the other hand, SOMA is where we've done all of those foreign currency operations, and at the end of the day, operationally, we just saw the discount window approach as adding another layer of complexity. We had to figure out how to get the resources from SOMA to the individual Reserve Banks in order to make the discount window loan. But this was a very close call, and it really was an issue of zigging rather than zagging. From an operational standpoint, we felt that SOMA was the better approach. Trish, do you want to expand on that?

MS. MOSSER. Not to be too technical here, but because this swap would be cash collateral, in that sense there's not a loan actually. The institution would have to produce cash dollars and get cash yen, or whatever, on the other side. If they're in the middle of a distress situation, where do they get that cash? Well, they're probably going to be getting it from the discount window, honestly, or perhaps from the PDCF or somewhere else in order to execute this transaction. So if there's lending going on to an institution like this, it would be lending in dollars. We don't want to impose where the cash dollars come from, as a practical matter. We don't know quite where their collateral might be. It might be in the PDCF. It might be in their bank. And it seemed, therefore, that to separate the liquidity swap part out from the lending part might actually have a few virtues.

MR. SHEETS. On your third question about the announcement effects, we freely admit that there are uncertainties surrounding the nature of those announcement effects. On the one hand, as you described, there's a possible adverse reaction. On the other hand, at present it's really no secret that major U.S. financial institutions are experiencing a range of stresses, so moves by the central banking community to further bulletproof liquidity in the global economy could be seen as a very positive thing.

But I grant that there is uncertainty. We don't know exactly how it would be received. That is why we gave you this "proposal A versus proposal B" structure. And if the Committee is concerned about the possibility of an adverse announcement effect or concerned that the announcement wouldn't have manageable effects, then maybe the best approach would be a delegation to the Subcommittee; the Subcommittee could establish these lines closer to a time when it looked like they were actually going to be drawn on.

The other thought I have in response to your comments is, even though we're likely talking about only a half a dozen institutions that have these sorts of vulnerabilities, if adverse circumstances arose, the implications could be very severe. So I think it behooves us to think through the possibilities beforehand, and, as necessary, put in place mechanisms to address those sorts of vulnerabilities to the extent that we can.

CHAIRMAN BERNANKE. Nathan, would you address an elementary question? If we delegate the authority to the Foreign Currency Subcommittee, why wouldn't that appear in the minutes, for example?

MR. SHEETS. It would appear in the minutes. But draft resolution B, which is the delegation to the Subcommittee, is not nearly as specific as draft resolution A. This is just saying that the FOMC delegated to the Foreign Currency Subcommittee the capacity to negotiate these foreign currency swap lines—it doesn't delineate the lines with the same degree of specificity that the other resolution does. In addition, it's not saying that these lines are established—it's only saying that the Subcommittee has the capacity to establish them if it so chooses. So it's not as specific, and our view, at least, is that it wouldn't be seen by the markets or by the world as indicating the same degree of urgency as an actual approval of the lines would.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. I have a couple of questions, and both of them have been answered indirectly through our give and take, but I wanted to make sure I was clear in my understanding of these issues. Both President Hoenig and President Lacker have asked my first question, but I'm going to ask it in a third way, just to make sure I'm clear. As we're contemplating the extension of the TALF into these other, more narrow, categories, is it because there are critical problems in these markets? Or is it also a supply issue? That is, we can't reach even the currently announced $200 billion if we are purchasing securities only in the categories that we've already announced.

The second question is somewhat related, and, again, I think you've already answered this. Do we know who is purchasing the lower-rated tranches of the securities, and what price are they paying for them? I know, Mr. Chairman, you said that the securitization market isn't even existent, but a lot of my contacts have been saying that it is important to the functioning of the ABS market to also get those lower-rated securities purchased and trading.

MR. NELSON. Let me distinguish in my answer between those assets which we requested the Board to add this week and the completion of TALF 2.0. For the assets that are being added this week, the objective is to fill out the ABS space, largely. That's the market that, in fact, shut down in the fourth quarter.

MS. PIANALTO. So that means that there are both critical problems in that market and that, in order to get the dollar amount that we're trying to put into that market, we need to expand the asset classes.

MR. NELSON. These asset classes themselves are smaller than the ones that have already been approved, but they are, nevertheless, relatively large in size. But it won't get us meaningfully closer to the ceiling. It's addressing a market. We're addressing it at this point because the assets are quite similar to the ones that we've already added, so that we were able to review their risks and bring them on board quickly.

MR. MADIGAN. President Pianalto, the reason for doing this is because those markets, like the other ABS markets are not functioning.

CHAIRMAN BERNANKE. We're not trying to fill up the bucket.

MS. PIANALTO. If we wanted to take on less risk, we could stay in the one market. There are enough of those securities. This is more about addressing the critical issues in those other markets.

MR. NELSON. Yes, that's right. And, in fact, some of the sectors that we're proposing for inclusion were harmed by the initial announcement because they are near substitutes to those things that we announced we were including. So it was very desirable to finish that phase. I think that the answer is relatively similar in the next stage—it's just that there's much more review that needs to be done. Perhaps it will be done within a month, but it then moves to the larger space of markets that are also impaired but are similar in that they are the securitized, high-quality space of newly originated securities. I'm sorry—your other question?

MS. PIANALTO. Is there any activity on the lower-rated paper? We are taking the triple-A. Is there any activity in the lower-rated securities?

MR. NELSON. I don't exactly know. In many cases, the lower-rated tranches are retained by the issuers, so that they're able to issue the triple-A securities by retaining the lower rated. I don't have any specific information about other lower-rated tranches that have been issued in conjunction with, admittedly, just a handful of ABS that are being issued at this subscription, and who is purchasing those.

MS. PIANALTO. Thank you.

CHAIRMAN BERNANKE. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I have two questions. The first one follows up on President Evans's earlier question. It's one for Spence. I have been somewhat concerned about exit strategies. I think it's probably going to be quite a while before we have to worry about it, but I think I'd feel better about expanding some of these programs if we did have that worked out. When I read the balance sheet scenarios, I was comforted at first to see that it's going to be a very long time before we need to deal with this at all. But then I looked at it a little bit more carefully. I thought maybe there was something in the scenario you laid out that was inconsistent, because it was based on the March Greenbook forecast, but that assumed no additional unconventional policies. Then, in your baseline you added $500 billion in purchases of MBS, which, in the staff memos on that program, has quite a bit of macro impact. It seemed to me that, with the likely impact of a $500 billion program, we would have a stronger economy than in the baseline. We would probably want to be raising rates in 2012 rather than 2014. I guess that would be about the same time that the TALF was building up and might be difficult to unwind. So my question is: Have I misunderstood that, or have I taken too sanguine a message from your scenario about exit strategies?

My second question is for Bill, and it concerns the extension of the TALF from newly originated asset-backed securities to legacy assets. As I recall, there were just a couple of paragraphs in the memo on that. But it seems to me to be a very big step, and I'm not sure I really understood it. Is this considered the PPIF program?

CHAIRMAN BERNANKE. President Yellen, in just a few minutes I will brief on all of the developments in the Treasury program, including this and the PPIF, and the FDIC role.

MR. HILTON. Well, it's a good observation. The assumptions we took for the baseline were just purely the economic ones. We did have an extension built into the outright purchase program in the baseline of $500 billion, as you've noted, but we did not try to calibrate a feedback effect, as you suggest, which would be a reasonable thing to do. That could move up a bit the period in which you might want to be otherwise raising the target rate.

CHAIRMAN BERNANKE. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. Some of my questions are for David and Joe. I'm looking at exhibit 3 again. I think the overall analysis is beautiful, but this unconstrained policy with the negative nominal rates is not really a feasible outcome. The truth is, you don't know what would happen, because it's not feasible. But then, to put that on here as where we'd like to be in these pictures, I think, gives a little bit of a misleading idea about how we should think about these large-scale asset purchases. Would it be possible to say, "If I could pursue an optimal unconstrained policy just on asset purchases, here's how much I'd do, and here's how I'd let it unwind"? Maybe that should be the baseline and we should skip the negative fed funds rate. Is that possible? What would that look like? Would that get you all the way to the funds rate line, or throw that line out? Or where would it take us?

MR. REIFSCHNEIDER. It's possible. Unfortunately, I haven't run it, and I'm kicking myself because we did talk about whether we ought to run it. So I don't know what the answer is. I do know that if you had a $2 trillion program and you went by our assumptions, you'd replicate the hypothetical and completely unattainable and maybe completely unrealistic unconstrained optimal policy line. One question would be: What's the cost of buying all of these long-term securities? I'm not sure what that is. This is part of the reason we hesitated on running this. But if you were completely unconstrained, you'd probably buy everything you could get your hands on in an attempt to drive long-term rates right to zero. But presumably there'd be some balance sheet costs—I'm not sure how to calibrate or describe exactly what those costs are. Presumably, there'd be a shadow cost, so you wouldn't buy everything you could get your hands on. But the basic proposition that "buy a lot" would be a good thing to do—yes, that would flow from that.

MR. BULLARD. So we have a baseline, which is just to stick with our zero nominal interest rate, conventional stuff, and not do anything else, just let the economy play out. Then we say, "Well, we can improve on that with some asset purchases." But we don't want to go too far, because you just get too far out of bounds.

MR. REIFSCHNEIDER. Right.

MR. GAGNON. One of the costs might be fiscal, in some sense.

MR. BULLARD. The natural thing to ask is: Why are there limits on this? As I've said before, there's the mystery of round numbers. Why $500 billion? Why not $750 billion? Why not $1.5 trillion?

CHAIRMAN BERNANKE. I think it's the problem President Yellen raised, which is the exit strategy. Is there a cost to exiting? I think that's the main constraint. Also, there are probably some costs associated with having banks holding enormous amounts of excess reserves.

MR. REIFSCHNEIDER. I think the staff decided that buying a trillion was feasible and buying $2 trillion may be feasible. But at some point, it's more of a question for you. And what point is it just not feasible to go beyond, between the market problems you potentially create and the potential problems in setting up for exiting? I don't know what the limit is, but I think the gist of your question is: Whatever that limit is, would it make sense to go to it? On this kind of analysis, the answer is "yes," whatever that feasible limit is.

MR. BULLARD. Our job as policymakers is to somehow trade those off. And I guess the model just doesn't help us with that.

MR. REIFSCHNEIDER. No.

MR. PLOSSER. But the question is: Wouldn't it be useful to try to get some handle on it? Suppose that limit's not $2 trillion, suppose it's $750 billion. How do I think about what that number looks like, even within some ballpark? I think it would just be very helpful for us to think about when those diminishing returns on the types of costs that the Chairman alluded to begin to kick in. And how do we think about that?

CHAIRMAN BERNANKE. Ms. Mosser.

MS. MOSSER. There's a completely different set of limitations, namely, how much the payment and settlement system can handle, depending on how compressed we make these purchases. We have not done this yet for Treasuries, but for mortgage-backed securities, we think that if we tried to buy $1½ to $2 trillion more this year, we would come close to breaking it.

MR. BULLARD. It's great to know these kinds of constraints.

MS. MOSSER. It's possible there's a workaround for those sorts of things. But if there is, we'd have to start it tomorrow.

CHAIRMAN BERNANKE. We could just acquire Fannie and Freddie directly.

[Laughter]

MR. BULLARD. I can't give up the floor without tormenting Mr. Sheets. In your report, and in some of the questions, we've talked about moral hazard problems. Your response, which I thought was a good one, was that you were going to do the pricing in a way that made it a backstop facility, so that you gave the proper incentives to financial firms to stay out of this facility unless it was absolutely necessary. Is your sense that that's going on with the other swaps, especially in Europe? Are we pushing them so that they are avoiding the same problem on the other side? Or do you think we run the risk of becoming a permanent part of the market for dollar funding elsewhere in the world, just sort of a routine thing?

MR. SHEETS. My sense is that the pricing of our dollar swap facilities globally, and particularly in Europe, is such that they had been attractive during times of stress. But as the market has healed a little bit, they're less attractive. Let me just be really concrete here. The outstandings to the ECB, as of early December, were about $314 billion under the swaps program. At the end of last week, those outstandings were down to $168 billion. So we have seen a sizable—slightly less than 50 percent—drop in those outstandings. Similarly, global swaps outstanding in early December were $582 billion, and at the end of last week they were at $330 billion.

So I think we're seeing the program and the pricing work the way that we want it to. During those year-end pressures and with exceedingly high stress, this liquidity was very attractive. As the situation seems to ease a little bit, it's not as attractive. I know that a number of our counterparties have had auctions where they've seen significant declines in participation. Some that don't have unlimited lines have actually seen some of their auctions undersubscribed. Here's another example of the decline on a much smaller swap line: Australia was running about $27 billion outstanding in late November and is now below $10 billion. So I think the pricing of these facilities—and Trish may want to expand on this—has been done so that the incentives are the way we want them to be.

MS. MOSSER. I think where the LIBOR rates are well inside, for example, one week and one month, those are the operations that are most undersubscribed and least used. There's more in three-month, where the market rates are still more elevated—again, this is reflecting credit risk and balance sheet constraints at institutions and how long they're willing to lend to each other.

I think the ultimate question is: If things continue to improve, will the swaps ultimately wind all the way down to zero? I think there's probably a risk that there would still be a few institutions that would like to continue to borrow, and we'll just have to take away the punch bowl when the time comes. But, like Nathan, I'm encouraged that, as rates come down, and in particular, as we basically get underbid by the market, the facility usage drops off pretty quickly. So as long as that trend continues, I think we're fine. Whether, in the end, we have to take it away is a possibility—we've had those discussions with the other central banks.

CHAIRMAN BERNANKE. Speaking of facility usage—[laughter]—why don't we take a coffee break for about 15 minutes, and then we will recommence around 4:30. Thank you.

[Coffee break]

CHAIRMAN BERNANKE. The next item on the agenda is billed as a discussion of the balance sheet and lending program issues. What I'd like to do, with your indulgence, is to start off by posting you on a number of developments that pertain to these programs, and then make some comments on some policy issues, and then we can have an open discussion. I just want to remind everyone, of course, that we have two full go-rounds subsequent to this discussion, so let's make this part of it more informal, and then everyone will have an opportunity, of course, in the go-rounds to give their views if they haven't had a chance in the discussion.

Let me begin with some postings. First, a relatively minor point. It's time to announce the amounts and schedules for the term auction facility for the second quarter. Unless there are objections, I propose to follow the recommendation of the staff and approve $150 billion per auction in April. That would be the same as we've had for some time now.

The second thing I wanted to talk about is the accord discussions with the Treasury, which I have mentioned a few times. I think that we are getting somewhat close to a possible agreement, and I want to update you on where that's going, and it's going to be relevant to some of the other points I want to make. The subject of the accord will be a potential conflict between the Fed's role as a monetary authority and as a financial stability authority, the point being: How do we define the role of the Fed in such a way as to minimize the conflicts between those two functions? Currently what we have in mind is a short document that would have—besides an introduction stating the motivation—four key general points.

The first point would be a positive statement of the need for Treasury–Federal Reserve co-equal cooperation during this financial crisis, so that is a positive good and something that we want to continue to do.

The second point is that, although the Fed may provide liquidity in its role of pursuing financial stability, the Fed must be insulated from credit risk and must not undertake credit allocation, which the accord will state are within the province of the fiscal authorities. What is meant by "credit allocation"—and this relates to some of the discussion about the TALF—is that, to the extent that the Federal Reserve gets involved in credit markets, we should try to do so in a broad way that addresses the macroeconomic situation as opposed to picking winners and losers within small categories of credit.

The third of the four principles is the need to protect the Fed's monetary stability function from the financial stability function, if you will. In particular, the Fed and the Treasury have agreed on the need for sterilization tools that will allow the Fed to prevent any increases in its balance sheet from affecting its ability to conduct normal monetary policy. As Brian already said, we have developed legislative language, and I have promises from the Administration of the highest level of effort to go to the Congress immediately—today—to try to get reactions, try to get some approval of either Fed bills or the SFP program, and that would be attached to legislation that is currently being contemplated. I'll say more about that. As Brian mentioned, I think we would prefer Fed bills, but we are putting both out there. The other thing that we are prepared to do, if we get resistance, and which I think a few people around the table might prefer, is to put a sunset on Fed bills or on this provision, so that it's only for the current situation.

The fourth element of the accord would be an agreement between us on the need for a comprehensive resolution regime for systemically critical nonbank financial institutions, which we do not have, and which I have called for and others have called for—a way to wind down nonbanks in a safe and orderly way. In particular, we would want to say that a key element of any such regime would be a careful definition of what role would be expected of the central bank. We might have a role—we might have a liquidity provision role, we might have other roles, depending on what the Congress wants to do—but it should be carefully defined. As part of this, sort of aspirationally, the Treasury at this point—and we'll just have to see how the negotiation comes out—will state its intention that when it is able to do so it will remove from our balance sheet the Maiden Lanes and the other residuals from our various rescue operations.

So I believe that these are the main elements that we need. From my perspective, it preserves our ability to do what we're doing now, which is to continue to support credit market functioning and to address the macroeconomic situation, even though the interest rate is at the zero bound. I realize it doesn't go as far as some perhaps might like, but I do think that it will be an important step, a historic step, towards defining an appropriate line between our various functions.

It should be clear that a principal reason that the Treasury is being so cooperative is that they would like us to support them in their bank rescue program. So what I'd like to do now is tell you where that is and what's going on there, and talk to you about what the Fed's role, if any, would be in that. And I should say that we have not approved anything. But they are looking for some kind of answer from us very quickly, and, therefore, this would be an opportunity for people to make comments.

The original bank proposal of the Treasury had five elements, of which four have now been laid out to the public: the supervisory assessment, with the stress scenario; the equity instrument—the mandatory convertible preferred—that would be given to banks that need it; the TALF—the joint TALF—which, of course, is already, as of this week, in operation; and the foreclosure mitigation plan. The last element, which has not yet been described and that we want to get to, is a public–private partnership for dealing with what they now call "legacy assets." I guess it's like "legacy systems"—and the word "legacy" used to be a good word. [Laughter]

I have to say that I agree with the objective. I supported the original TARP motivation, and a big part of that was to remove opaque and damaged assets from bank balance sheets. I believe that is part of any successful bank cleanup program, because it will allow banks to attract private capital and give them balance sheet space to go back to normal lending. So I do think that's an important element of the plan.

Currently, this fifth element has, in turn, three parts. This is very complicated—sorry. The first part, which has nothing to do with the Fed, is an FDIC facility. The purpose of the FDIC facility would be to take damaged portfolios directly off of the balance sheets of banks;

this would happen after the conclusion of our supervisory assessment, during the six-month period in which banks are supposed to be raising capital or otherwise taking action to stabilize themselves. A bank would offer an asset pool, and a third-party valuation agent would estimate an expected price on the pool. Then, the supervisor and the bank would discuss implications for pro forma valuations and the stability of the bank—capital needs, and the like. So there would be some preliminary discussion about whether or not the bank should actually engage in making this offer. If the bank decides to offer the asset pool, then the FDIC would dispose of it in the same way that it currently disposes of assets of failing banks: It would have an auction, and the price that the bank receives for the pool would be determined by the winning bidder. This is going to be highly leveraged, which is the reason that they hope to attract bidders who will pay more than fire-sale prices. The leverage will come in two forms. One is that there will be an 80/20 partnership between the U.S. government and the private participant, with 80 percent of the capital from the government. And then, there is leverage provided by the FDIC, which is supported by FDIC guarantees, to attract funding. An example of the leverage is that given a $19.5 billion portfolio, a private investor could have a 20 percent interest in it for $557 million—obviously, this is a very highly leveraged position.

Why would banks want to do this? It's not clear that they will, but there are some possible reasons. One is that we are looking in our supervisory assessment at embedded losses that go beyond one year, beyond the provisions. So banks may make the determination that it's in their interest to sell some portfolios, even if they're in the accrual book. Second is the proposition that, by selling off assets, a bank can make itself attractive to private equity and thereby, perhaps, avoid a capital injection from the U.S. government. So that's the motivation. Of course, typically, the sale of assets, if they're marked down, would create a bigger capital hole than initially, and so the U.S. government will have to stand ready to provide enough capital in case the private sector is not forthcoming.

That's the FDIC part of the plan. It covers only portfolios sold directly by banks and possibly bank holding companies. The FDIC is not willing, or says it doesn't have the authority, to deal with assets that are not taken directly from banks. The other two parts of the plan involve creating facilities to buy various classes of troubled or legacy assets, essentially from anybody in the market. And the question is: How would they work? So that's where the Fed would be involved under the Treasury's proposal.

Before I talk about them, let me just say one word about process. The Fed has been a full participant in all of these discussions. We've done the lion's share of the work on a number of these issues. And we have, in general, tried to resist the Treasury's strong demand for precipitant action, and tried to slow them down, and tried to make sure that we get this right, if at all possible. We've also been very careful throughout this process in trying to ensure necessary protections for the Fed—that's what the accord is about. Another example is that we essentially vetoed a ring-fencing proposal, because we didn't like the way the Fed was involved in those types of operations. I should also say that I did have the opportunity to meet with the President on these issues; of course, we talked about a wide variety of things, but we spent about 20 minutes talking about the Fed's role and our concerns and our issues, and he was very receptive. In particular, he promised his full support for sterilization tools. And I'll mention parenthetically that I have talked to him about inflation targets as well, and he said, "That sounds really good." I'm sure his advisers will get to him before long—[laughter]—but he was interested in that.

Okay. So what are these two last parts of the plan? One part is public–private partnerships, which are basically hedge funds that have 80 percent government ownership and 20 percent private ownership. You could have the U.S. government in partnership with PIMCO, for example. Those hedge funds will be able to buy assets essentially from anybody; there may be some restrictions on the type of asset, but not restrictions on whom they can buy them from. There would be a 20/80 share in terms of returns, because the private sector is putting up 20 percent of the capital.

The final part is TALF financing—that is, the Fed would allow these legacy assets to be financed in the TALF. It's a little hard to see at first, but if you look at it carefully, you'll see that the combination of the public–private partnership—where the equity share gives shares in the assets—with the financing facility is really economically equivalent to the FDIC facility. And what appears to be a difference—the put option in the TALF and the haircuts having to differ according to the asset risk—is actually paralleled in the FDIC program, because there they're going to have to set leverage according to asset class in more or less the same way. So the combination of the two is essentially the same kind of thing, but it works for any type of asset.

There are a number of issues. One is certainly the viability and workability of the program. I have to say that our initial reactions were negative, and we told the Treasury that. Our concern was that it would be very, very difficult to deal with these very heterogeneous assets and to find haircuts that would work for each asset. However, we have looked at it more carefully. A team that included Mike Gibson from the Board, and people from New York as well, has done what they called a "proof of concept" analysis to ask whether this could be made to work. They looked at some representative asset classes, and their conclusion is that it is workable. But they think that, if we're going to do this, it would be necessary to get outside contractors to recommend to us what the haircuts ought to be, what the risk profiles ought to be, and what capital we should require for safety. In addition, they think we should have asset managers to take care of these things, so that we don't have to burden our staff further.

The second issue is what it implies for the size of the Fed balance sheet. We had previously discussed this when Secretary Geithner first put out the bank plan. He announced, with our agreement, that the $200 billion TALF program could be expanded "up to"—a very cautious set of words—"up to" $1 trillion. At that time, we thought that the extra money would go into CMBS and RMBS. The idea here is that we would not have a change in that—that even if legacy assets are included, we would still be "up to" $1 trillion. So, in that sense, we would not be changing the rules of the game.

My own view is that we will not get to $1 trillion. First of all, the Treasury is very short of capital. It has to fund not only the capital of the banks, but it also has to fund the FDIC program and the public–private funds, as well as the TALF. So that's going to be a significant barrier to expansion. Then, I think that, practically, as we've seen, the process is just very difficult. It requires a lot of analysis, and what we've seen in the initial work on some of the simpler assets is that we may not get the demand that we thought. And, in any case, it's not going to happen for some months down the road. So there are implications for the balance sheet, but they're not different from what they were prior to this.

With respect to assurances, I've already talked about the accord. And, particularly with regard to the Fed bills work, we will maintain the "no credit risk" principle by insisting that we be fully protected if we do this. I'll mention one other thing, which has not been explored, but which seems to me to be a very live possibility. The senior debt obligations of the TALF would be very safe assets, because they would be senior not only to the Fed and the Treasury, but also to the haircuts, so it seems possible to me that one other way to mitigate the effects of this on the Fed's balance sheet would be to sell debt to the private sector to finance part of the TALF. I should say that we had at least one presentation on this to the Board. The Board has not taken a decision. We wanted to bring this up here and hear comments from the FOMC. We are not fully persuaded that it's workable and viable. In any case, we're going to have to come to some conclusion pretty soon, because the Treasury is very eager to get going. But we did want to bring this to you and tell you what was going on. I'll be happy to answer questions about this in a moment.

Before I give up the floor, though, I want to talk just a bit about the policy decision for this meeting. The most likely direction that we would go, as suggested by the alternative statements, would be to increase our asset purchases. I'm concerned—I don't want us to be making that decision in the last five minutes tomorrow when we're trying to work on the statement. So I'd like to encourage at least some discussion of that today, because it fits in with the presentations that we heard. Although we don't have to make a final decision until tomorrow, at least I'd like to know where people are, roughly speaking, on this topic.

I will tell you what I think, because I'm fairly open on the subject. I do think that, as we will discuss, the economy has deteriorated. Our balance sheet has shrunk over the last few months. It's true that we'll continue to buy MBS, but our TALF activities, even if we get into the legacy TALF, are not likely to scale up for some time. So my own view—again, I want to hear everybody's views—is that at this meeting, we ought to approve an additional asset purchase. One possibility, which is probably the minimum we ought to do, would be to double the agency program from $500 billion MBS and $100 billion debt by midyear, to $1 trillion and

$200 billion by the end of the year. This would essentially do for the second six months what we're doing for the first six months of 2009. That certainly would be a possibility. Let me just say that I'm very interested to hear views. We might want to go bigger than that, if we think that we want to be more aggressive.

The other possibility, of course, as we've discussed, is also or alternatively to buy Treasury securities. People will express their views on that. I think that's a potentially useful direction to go in, and I'm very open to that, if that's what people want to do. I think the U.K. example is promising. It does show that there can be benefits not only to the Treasury market but also to the broader private markets. And I'm not that concerned about adverse implications, say, for inflation expectations, because we've all seen Treasury purchases in many other contexts; besides the British context, the Japanese have done a lot of this, the Swiss, the Canadians are going to start doing this. It would be potentially in conjunction with MBS purchases. So I think there are issues there, but I'm open to this possibility.

I want to say that I would like to hear some discussion today and in the go-round tomorrow, so that when we get to the final policy decision we won't be making a spur-of-the-moment decision. We'll have a sense of where everybody is and what the best outcome might be. Let me stop there and open it up for general discussion or questions. Let's try to maintain an informal format, and, remember, we have two go-rounds ahead of us. Questions or comments? President Plosser.

MR. PLOSSER. I have just a clarifying question. When you say this stuff merges into the TALF, I'm just not quite sure I understood how this would work. Could you explain that again?

CHAIRMAN BERNANKE. Basically, what happens now is that an investor buys a security and leaves that security with the Fed and gets 90 percent financing—or 10 to 1 leverage—against that security. There's a put option, because it's nonrecourse lending. So it would be the same thing. In this case, the public–private hedge fund—80 percent Treasury, 20 percent private sector—would purchase some RMBS, and it would finance that RMBS—get leverage on that RMBS—by depositing it at the TALF in the same way that an investor does currently. The main difference is that the haircuts would have to adjust according to the risk characteristics of the assets.

MR. PLOSSER. Okay. So we would have to set a new schedule of haircuts for these securities, because presumably they would be the much riskier and perhaps toxic assets of the banking system.

CHAIRMAN BERNANKE. Yes. And we'd have to make sure we had sufficient capital from the Treasury. I think that what might be going on is that these might happen in one-off deals where portfolios are being presented, and that would require us to hire investment banks or asset analysts to do the work for us and give us their assessments of the risk characteristics.

MR. PLOSSER. Back to the accord issue for the moment—you talked about Maiden Lane going back to the Treasury at some point or under certain conditions. Would these assets in the TALF be candidates for that same sort of transfer?

CHAIRMAN BERNANKE. In one indirect sense—if we find that we can no longer finance them because of monetary policy considerations, then, under the SFP model, Treasury financing would replace Fed financing. But the difference between this and Maiden Lane is that Maiden Lane involves very long-term assets, and the TALF program is a three-year program, and presumably it would be winding down.

MR. PLOSSER. Okay. Thank you.

CHAIRMAN BERNANKE. A two-hander from President Evans.

MR. EVANS. Just to clarify—the legacy-asset aspect of this would be within the currently envisioned $1 trillion?

CHAIRMAN BERNANKE. Within the current limits, yes. President Lacker.

MR. LACKER. You said something that confused me. You said we would be protected against risk because we would be senior to the Treasury. Then you said "and the haircuts"?

CHAIRMAN BERNANKE. I was talking about the possibility of getting private debt as a substitute for Fed financing in the TALF. So that's a hypothetical possibility. But, in general, the way the TALF works is that we have a haircut to protect us, and, if there are any further losses, then the Treasury is the first to take them.

MR. LACKER. But the haircut and the Treasury capital aren't two separate things, right?

CHAIRMAN BERNANKE. No, they are two separate things.

MR. PLOSSER. But the Treasury capital is the same. The ratio hasn't gone up for these assets relative to the TALF assets.

CHAIRMAN BERNANKE. We've got to figure out two parameters. Probably the simplest thing would be to pick a single ratio of Treasury capital to leverage, because we don't want to do that asset by asset. So the haircuts will have to vary, and the combination of the haircut and the Treasury capital will protect the Fed against loss.

VICE CHAIRMAN DUDLEY. Or we could take the Treasury capital and apply it against all of the assets.

CHAIRMAN BERNANKE. That's what I'm saying, yes.

MR. LACKER. So that's separate from the Treasury capital invested alongside the private sector in the partnerships?

CHAIRMAN BERNANKE. That's separate from it, yes. Treasury capital comes in in two places—one to give leverage and the other to protect the Fed.

MR. LACKER. Back to Maiden Lane—would that include the two ring-fence guarantees?

CHAIRMAN BERNANKE. Again, this is aspirational. It's not going to happen in the next six weeks. It's not going to happen in the current political atmosphere. But it would be a stated intention of the Treasury that, at some point, they would be looking to take these things off our hands, and that would, in my mind, include those things as well.

MR. LACKER. I may be pressing you for things that haven't been put on the table, but do you envision a public statement with all of these elements in it?

CHAIRMAN BERNANKE. Yes, within a week or two.

MR. LACKER. And would it lay out a timetable on any of this, or the transfer?

CHAIRMAN BERNANKE. It will state that we are actively engaged on the Fed bills-SFP front. It will state the principle that the Fed is not to take credit risk, which we will enforce. It will state our intention, which is a strong intention on both sides, to undertake the negotiation on a resolution regime that will define what role the Fed might have in those kinds of contexts. And it will state the aspirational goal of the Treasury taking Maiden Lane off our balance sheet.

MR. LACKER. Help me understand the statement about the Fed not taking credit risk, because we do, and it's just a matter of degree.

CHAIRMAN BERNANKE. Well, de minimis. Obviously, we take credit risk—even the CDS spreads on Treasuries are not zero.

MR. LACKER. Would we have an understanding with the Treasury about what "de minimis" means?

CHAIRMAN BERNANKE. Bill talked about it. In the case of the TALF, we have worked out criteria where very extreme—very extreme—loss outcomes do not touch the Fed, and probably don't even touch the Treasury; but they don't touch the Fed.

MR. LACKER. Have we quantified that? What is it?

CHAIRMAN BERNANKE. Bill, do you want to talk about that?

MR. NELSON. In the risk analysis for TALF 2.1, we looked at a scenario which we considered to have a 1 percent probability. And even in those scenarios, all of the credit costs were covered by the risk spread itself, so not only the Fed but also the Treasury did not take any losses. Our objective is basically to follow that principle with the legacy TALF, I think the principle would be that under our stress scenario neither the Treasury nor the Fed would be expected to take losses. So losses, in order to come to the Fed, would first have to eat through the Treasury protection, which we don't expect to happen at all in the stress scenario.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. I'm trying to understand this. The TALF is for three years, and the way I see it, we're taking the assets they put into this organization, which you expect to liquidate and recover at least enough to the point where we're protected. But how confident are you that we can roll this stuff off our balance sheet in three years? These are distressed assets. So we might have to turn them over later, or the market would have to change so much that you could sell them, and whoever has the 20 percent risk would take any write-off. I see us as taking the "bad bank" position in a "good bank–bad bank" scenario.

CHAIRMAN BERNANKE. We're financing the bad banks. We aren't the capital in the bad bank.

MR. HOENIG. As long as in the liquidation we don't go past the capital that's placed into it, right?

CHAIRMAN BERNANKE. That's right. But in terms of your other question, we'll have to be very careful about maturities, and so on. For a three-year loan, when the three years are up, if the value of the asset has fallen by more than the haircut, they will put the asset to the bad bank, and the asset managers of the bad bank will sell it or dispose of it. If the value of the asset has not fallen as much as the haircut, then there will be a strong incentive for the public–private partners—and, of course, for the government, because the Treasury will be the dominant partner—to find other financing.

MR. HOENIG. In your exploration of this, have you thought about the Congress setting up a good bank–bad bank facility? Are they resistant to that? Or do we just think that's not a good option?

CHAIRMAN BERNANKE. I think the Administration is weighing the possibility of legislation to get additional authorities, for example, considering whether it would be possible to change the scoring on the TARP, which is very unfavorable. If they can get appropriate authorities, I think they would do that. But the politics is just unbelievably bad, and it's very difficult to get anything done. I think it's their intention to try. I think they believe that they may not have enough resources to do all they need to do, in which case they will pursue other resources, and we can see what happens. My own guess is that, one way or another, we're probably not going to end up taking very much stuff, either because there won't be that much interest, or because there will be other facilities, or because some other arrangement will develop. This is in order to have something that's part of the bigger program in the short term.

MR. FISHER. Mr. Chairman?

CHAIRMAN BERNANKE. Yes.

MR. FISHER. I didn't understand you there for a second. When you say "would not take much stuff," are you saying the bad bank would not take some of these assets?

CHAIRMAN BERNANKE. I was just conjecturing that, in the end, this legacy TALF would probably not do very much business.

MR. EVANS. Is that because of the pricing?

CHAIRMAN BERNANKE. Because of the pricing and the difficulty of finding private sector participants.

MR. EVANS. It's only a bad asset at a high price. If the third-party assessment comes out at a reasonable price—

CHAIRMAN BERNANKE. Right. So we have to mark it down to a market price which we'd lend against, and then there's a haircut on top of that, of course. So, the question is: Is that attractive?

MR. FISHER. Can I come back to the Treasury's quid pro quo, particularly the third key element, the public–private partnership? You mentioned that there was discussion within the Board—what are the concerns as the Board views it?

CHAIRMAN BERNANKE. The complexity is one issue: Would we be able to figure out how to do haircuts in a way that would be meaningful—that is, so that, on the one hand, the haircuts would be not so conservative as to imply no business, and, on the other hand, they'd be conservative enough to provide enough safety? Another issue that we and the FOMC are considering more broadly is: What are the implications for our balance sheet, and management of our balance sheet?

MR. FISHER. This may be for later discussion. Maybe I'm a little confused. If I go back to our previous discussion and a comment that I think Mr. Nelson made—did you say that we were looking at this, the legacy assets into the TALF, as a way to take some bad assets off the balance sheets of banks?

MR. NELSON. Is the legacy TALF a means to try to take the bad assets off bank balance sheets? Yes, that's one of the objectives.

MR. FISHER. I'm a little confused. Could you clarify that please?

CHAIRMAN BERNANKE. The way it is now conceived, the FDIC would be responsible for taking portfolios directly from banks and probably bank holding companies. So the answer to that question I guess is, "no." The intent would be to try to create more liquidity and pricing discovery, and so on, in these markets generally.

MR. FISHER. So we would use the public–private hedge fund, as you described it, as a way to end up with some kind of pricing mechanism for legacy assets that trade on the market.

CHAIRMAN BERNANKE. Correct. And I suppose if they wanted to buy from a bank, I don't think there would be any restriction on that. But that's not the point of it.

MR. FISHER. It just seems to me we are going through—this is a comment, and it, again, may be based on ignorance—a lot of jujitsu here to get around the issue of creating a good bank–bad bank, taking the toxic assets in the bad bank and clearing it in that way. The TALF is becoming inordinately complicated. And I guess, if you'll forgive a horrible pun, I'm worried

TALF is getting too clever by HALF. [Laughter] We're adding one segment on top of another, just as we're beginning to figure out how this thing is going to work.

CHAIRMAN BERNANKE. As I said, I'm sure this will not be operational for months. So that's one reason that I think that we can't wait for it in terms of our broader policy objectives.

MR. FISHER. But you are talking about moving very quickly on this.

CHAIRMAN BERNANKE. It's still going to be months, I am sure.

MR. PLOSSER. Mr. Chairman, just a two-hander. I was going to ask a question about the difference between the FDIC program and the TALF-related program. How would I think about what type of assets would go to the FDIC program and which ones would come in to us through the hedge funds? Based on the relative pricing of those two mechanisms and how they would work, which vehicle would attract what types of assets?

CHAIRMAN BERNANKE. As I said, economically they're very similar. The FDIC, though, would deal directly with banks and could take a whole portfolio—it could be a completely heterogeneous portfolio—and there would be a bid on that portfolio, just the same way as when you wind down a failed bank. I would imagine that the remit for these hedge funds would be "buy RMBS on the market." I think it would be less heterogeneous than the portfolios that the FDIC would be taking. The FDIC would be a much more classic bad bank type of structure.

MR. LOCKHART. Would the design of the heterogeneous portfolios be up to the seller or up to the FDIC? There's a sort of RTC analogue here: In the RTC period, assets were put together to make the package attractive enough to bid on, knowing there was some terrible stuff, but also some not-so-bad stuff in it. Who is going to design those portfolios?

CHAIRMAN BERNANKE. If I'm incorrect on anything, please, staff members, don't hesitate to correct me, but my understanding is that the supervisors and the bank together would determine the portfolio. So in many cases there would presumably be a mixture of accrual and marked-to-market assets, a mixture of different kinds of assets, derivatives, and other things that are hard to break off but can be part of a portfolio. President Bullard.

MR. BULLARD. I just wanted to ask a few questions about the accord. What kind of legal standing does an accord have? Is this a gentleman's agreement, or what is it?

CHAIRMAN BERNANKE. Well, we're one step ahead of the 1951 accord, which wasn't even written down. [Laughter]

MR. BULLARD. Except in textbooks?

CHAIRMAN BERNANKE. To my knowledge, there is no document representing the 1951 accord.

MR. BULLARD. Okay. So it's a genuine agreement.

CHAIRMAN BERNANKE. This would be an agreement signed by me and by the Treasury Secretary and approved also by the President and the Administration. We would share it with congressional leaders as well.

MR. BULLARD. The '51 case held for a long time because there were no attempts to change it subsequently, and that's the hope here as well, I guess. But it's really just an agreement between the Administration and the Fed for now. Two of the provisions are really "asks" from the Congress. Do I have that right?

CHAIRMAN BERNANKE. Right. They are asks from the Congress. The Treasury and the Fed agree they are needed and will cooperate in trying to get those things passed.

MR. BULLARD. The Congress may or may not agree to them.

CHAIRMAN BERNANKE. Well, that's always, of course, a risk.

MR. BULLARD. So the accord in '51 was about how the Fed and the Treasury were actually going to interact. It did not involve this part about what we're going to get the Congress to do or not do. I'm just trying to understand what the object is.

CHAIRMAN BERNANKE. For example, it will formalize the understanding that the Fed will take no credit risk in the TALF.

MR. BULLARD. Okay.

CHAIRMAN BERNANKE. I'm happy to answer as many questions as people want to ask, but, again, I also hope to hear something about asset purchases before we close today. Vice Chairman.

VICE CHAIRMAN DUDLEY. On asset purchases, [laughter] I think there are lots of good reasons to escalate: The economy is weaker; financial conditions are tighter; in addition, the TALF is off to a slow start because of all of the stuff that's swirling around on AIG and TARP. The broader TALF, I think, is going to come much later. While there might be an announcement on legacy TALF relatively soon, the actual operationalization of that, I think, is going to take many months—just given that the TALF 1.0, which we're enacting today, took four months. And the PPIF—it's not even clear whether banks are going to be willing to sell assets to the PPIF. Are they going to get a high enough price to engage in those transactions? So it seems to me that right now it's on us. And it's more on us than it was even a few weeks ago, because I think the political climate has deteriorated significantly, so the ability of the Administration to go back to the Congress and get more TARP money is significantly less than it was even a few weeks ago.

Then the question is: What should we escalate to? The lines in David's graph suggest that \$2 trillion would put us roughly on top of the unconstrained line. And, conveniently, the numbers I was going to advocate total \$2 trillion, by coincidence rather than by design. We did not talk beforehand, as David can attest. [Laughter] I think that I'd want to escalate the agency MBS program to more than \$1 trillion, because escalating to \$1 trillion through year-end is basically keeping the run rate exactly the same as the program is doing right now, which is essentially \$500 billion every six months. So I think we should escalate the program, and I would suggest \$1½ trillion. The market will not give us much credit for just extending the program another six months at the same purchase rate. I think the market generally expects us to extend the program, so I don't think that's really going to have a lot of benefit.

I would increase the agency debt from \$100 billion to \$200 billion, so I'm at \$2.2 trillion, to be honest. But I'm not counting that. I don't think the agency debt is really very important or that effective, but I think leaving it out raises more questions than it's worth raising at this juncture. And I would engage in a Treasury purchase program. The last time I was here, I argued mostly against it. But I think the stakes are pretty high right now. We don't know exactly how much a Treasury purchase program would do, but, if we start one, we'll be able to answer that question. There's a lot of information that we really just don't have right now. So I would suggest engaging in a Treasury purchase program, starting immediately, up to \$500 billion, concentrating in 2-year to 10-year maturities and buying both nominals and TIPS. We can also purchase things outside of those maturities to avoid distortions to the shape of the yield curve. But that's what I would do.

One other thing before I give up the floor—I just want to stress what the point of the reverse swaps is. The point is to prevent some bad piece of news that creates a liquidity run in some foreign market from putting us in a very difficult position in which a foreign central bank is unwilling to lend to a U.S.-owned company because it doesn't have enough collateral, and we don't have the ability to get them the money quickly enough to prevent a default. I think that we want to do this. I'm not sure whether we want to delegate it to the Subcommittee or actually enact it in the FOMC; but it would be really unfortunate if we didn't do this, and then something happened that caused the exact problem that this reverse swap will address, and then we'd say, "Why didn't we do what we could have done to avert it?" So it's a belt-and-suspenders approach, but I think we're in an environment where we need both a belt and suspenders.

CHAIRMAN BERNANKE. President Evans.

MR. EVANS. Thank you, Mr. Chairman. On the asset purchases, my view is that the hole in aggregate demand is really quite large, and as I look at the figure on the gap between the optimal policy and the zero bound, I think it's really stunning, so I'm open to proposals for substantial purchases. In fact, I'm not totally confident in any particular program that we have proposed, so I favor diversifying: Both MBS and Treasuries sounds like a pretty attractive option from my standpoint. I'm not quite sure how to evaluate the numbers that the Vice Chair just laid out. I know I can't disagree with him, but I don't quite know how to calibrate these other policy measures like in the Greenbook and Bluebook figure. So I'd like to hear more about that tomorrow, but I'm open-minded.

On the accord, it sounds good. The way we've talked about it is that it's a long-term accord. Right now we have a lot of assets on our balance sheet that we would like to be able to get rid of. If issuing Fed bills is the way to go, that would be fine. You mentioned that some might favor a sunset provision. Would that be on the order of three or four years, or 20 years?

CHAIRMAN BERNANKE. Five years, probably.

MR. EVANS. It sounds like it's aimed at getting us out of the current situation, and I think that's a good idea. But over the next 30 years, our ability to have that authority might be a problem. In reading your testimony on the 13(3) authority and the grilling that you got, I don't recall anybody who thought it was a great idea that the Fed had the authority to undertake this on their own, and they wouldn't admit that they knew that this was possible, at least according to what I had read. So I just wonder, would a future accord be a 13(3)-type of activity that causes us to acquire these assets, and then we'd need to issue bills? I guess I'm just wondering under what circumstances we would issue bills.

I think the lasting lesson from all of this is that we don't want to get here again, that we ought to conduct policy in a way to avoid this. Future regulatory changes that might help out are obviously one way, market discipline is another, and responding to large changes in asset prices that we don't understand very well might be another. But keeping the average level of the fed funds rate at a place where we don't expect to hit the zero bound again might be much more attractive now, having gone through this, so that might be something we should talk about at some point. If along the way you could get an explicit numerical price objective out of this, that would be quite good. And then, lastly, let me ask another question. If the likely take-up on our TALF for the legacy assets is low, and given the prudent central bank lending that we are doing (at least according to the people I talk to in the marketplace; they don't find this very attractive), is the Treasury going to be satisfied with that? How are we going to respond to them?

CHAIRMAN BERNANKE. Well, my assumption is that they would move on to other strategies, which would involve perhaps the Congress, not us. Which would be fine.

MR. EVANS. That would be more desirable from a public policy standpoint. Thanks.

CHAIRMAN BERNANKE. President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. On the swap lines, I do think that we could put in the minutes that it's basically procedural—it's symmetric with what other foreign central banks have done with us. I would argue for being transparent. We need to be prepared for foreign funding problems, and I think it just makes sense to be clear on it.

In terms of the resolution of holding companies, which ties into the foreign swap lines, I think that's as important an issue as the Fed bills, and I think trying to find a way to push resolution makes sense. If you could argue that, if we had the resolution powers now we could be doing much more effective things with AIG, there may be a hook to actually move things along more quickly. I don't know where our thinking is, but I see this as a chance to try to push that, particularly if it would give us an opportunity to abrogate contracts in the event that we or somebody else had resolution power. But I think we should try to move that just as quickly as the Fed bills.

In terms of the removal of problem assets, I agree that's a critical component. I strongly agree that we shouldn't be doing ring-fencing institution by institution, so I'm glad we're moving away from that strategy. I think the first-best solution would be more aggressive write-downs of assets, creating a bad bank for the most troubled banks. I think it's a much more straightforward solution, and I realize that it does mean much more capital for some banks because we will be taking aggressive action. But I think that, just as we shouldn't have banks deferring losses, we, as the central bank and the Treasury, shouldn't defer losses if they're really on the balance sheet. The first-best solution, I think, is to try to work with the bad bank solution.

The TALF for problem legacy assets—I think we shouldn't make these programs particularly voluntary. If we're going in and forcing write-downs, and the write-downs are fairly significant, the banks are going to want to participate in the program, because they will have already taken the losses. So, instead of trying to make it voluntary, I think we should have the write-downs be severe enough that they're going to want to get the assets off their balance sheets because they've already taken the losses and they're not trying to defer additional losses. Thinking about how we can have a supervisory strategy that guarantees that outcome might make it much easier than hoping that people volunteer their portfolios. To the extent that we can do that, that would be my preferred option.

In terms of the policy, I think this is the time to be very aggressive. I strongly prefer option A in the Bluebook, or possibly even a little bit larger, as Vice Chairman Dudley has suggested—I'd be open to that as well. We're far from reaching either element of the dual mandate over the forecast horizon. This is the time to push rates down. We have a new program from Freddie Mac and Fannie Mae that's going to include refinancing. The refinancing involves paying closing costs. Now is the time to push the rates down, so that the people who are refinancing and participate in that program only have to pay the closing costs one time. It will also square us with some of the other issues in terms of encouraging servicers to come up with solutions. It's also spring—the right time for the housing sector, and we do need the housing sector to start bottoming out, getting people back into the market. If we push rates down significantly right now, I think many people will start coming off the sidelines, because even if they don't think prices have hit bottom, they will probably think interest rates are at an all-time low and they may want to take advantage of that. So I think it's a very good time to be doing that.

I do have concerns that the TALF is off to a slow start. When I talk to hedge funds, they're quite skeptical about how successful that program is going to be. We've been kind of relying on that as possibly being a successful policy tool. Because I'm a little more skeptical about either the TALF or the public–private fund working, it calls all the more for more aggressive policy, which is embedded in option A. So I think option A, which has both the Treasuries and the mortgage-backed securities, is the way to go.

CHAIRMAN BERNANKE. On the resolution authority, Board staff has been working on legislative language, and Governor Tarullo and others are reviewing it. I think, frankly, that the Congress will be looking to the Fed and the Treasury to come up with the language, because it's a very complex set of issues. And we are working on it. President Bullard.

MR. BULLARD. I was just going to talk about asset purchases a little bit. What I'm concerned about is these one-off moves, and I've been concerned about round numbers— $1 trillion, $500 billion, and so on. I think all of the things that we do in interest rate targeting should also come in when we're doing our asset-purchase program. In interest rate targeting, as it has developed over the last 20 years, it's all about the whole path of interest rates over a long horizon in the future. That's all part of the policy: How credible you are about letting the private sector know how you're going to behave and how you're going to react to things in the future.

When we hit the zero bound, that all went out the window. Now we're taking one-time actions, with the private sector very uncertain about how we're going to frame that in the future. And we know that, no matter what model you have, that's not the right way to do policy. So I think we want to get back to something like policy paths for asset purchases. Even if we don't say it in our statements, the private sector is already imputing what they think that's going to be. They just have bigger confidence bands around it than they would otherwise have. So what I was going to talk about during the policy go-round is somehow to get to where you can announce continuations of purchases at some rate, or something like that. My intuition is that

that's the right way to do these policies, instead of saying, "I'm going to come in with $500 billion to this particular market on this particular day, and I may or may not do any of this in the future."

CHAIRMAN BERNANKE. This is why I wanted to hear some of this today. If you have a specific suggestion, you could bring it tomorrow. But I would comment that we have been pretty clear about what the timeframe is. We've said $500 billion by midyear, and the proposal would be a trillion by the end of the year. So we are effectively giving monthly rates.

VICE CHAIRMAN DUDLEY. But then, what happens after that is the problem.

MR. BULLARD. Yes, what happens after that? And, I think, on the Treasury purchases, we have vacillated a little. I think as a Committee that we want the whole path out there for the policy tools. Also it might be good to indicate a little bit of contingency about buying at a certain pace; for example, "we're looking at the data as they come in—if they come in a little stronger in the fall than we think, maybe we'll tamp down a little bit," that kind of thing. That's what I'd also have in mind. Otherwise, you commit all the way to the next year, or beyond next year, and it turns out something else happens that you didn't expect.

CHAIRMAN BERNANKE. The Taylor rule, and so on, emerged essentially from historical experience. It wasn't ever stated in advance. So that's a problem: We don't really have a reaction function out there, we're sort of just starting the rational expectations process. We need a way to think about that, and suggestions are welcome.

MR. BULLARD. We should feed back the conditions. We don't know what the rule looks like, I agree.

CHAIRMAN BERNANKE. We could say something like, "We will continue as long as," or something.

MR. BULLARD. "We're going to monitor conditions." "We're going to buy at this pace." "We give ourselves the option of buying at a slower pace if things come out better than expected," or something like that.

CHAIRMAN BERNANKE. Okay. I appreciate that, and suggestions are welcome. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me confine my remarks to the large-scale asset purchases. I must admit, I am quite uncomfortable with the idea of purchasing long-term Treasuries in size. As the papers described to us, the benefits could well be quite small. My sense is the costs might not be. This is an idea that we've been discussing for a few months, and as I think about the need that we all feel to escalate, my sense is it has gotten more attractive now because we have run out of some very good alternatives.

Let me highlight some of these concerns. First, I think the nature of the Treasury market is, frankly, quite different from the nature of the GSE markets that we've already entertained—and I think I'd be comfortable entertaining those more. The long-term Treasury markets are functioning reasonably well; they're highly liquid and the desire for risk-free assets is still quite high. My sense is, notwithstanding those facts, at this particular moment in time, Mr. Chairman, there are serious questions being raised by market participants and market commentators about the government's ability to fund new higher expected levels of Treasury issuance—that is, they may or may not, in the market's view, be able to find buyers at market-clearing prices. Then if the Fed is perceived to be monetizing debt and serving as a buyer of last resort in the name of lowering risk-free rates, we could end up with higher rates and less credibility as a central bank. My own sense is this could be self-defeating.

Very recent discussions that Nathan Sheets and I had with certain large non-U.S. buyers of Treasury securities confirmed these suspicions. They note that at times like this we are one government, and if the Treasury and the Federal Reserve have to collude to somehow solve the issuance problem, it could be signaling greater problems about our ability to fund ourselves. So I would say my concerns are particularly pronounced at a time like this.

Now, of course, all central banks are struggling with arrangements between the fiscal authorities and the monetary authorities, as we are. There's no easy way around it. I think the accord is certainly a step in the right direction. But I fear that if we are perceived to be colluding with the Treasury around this idea, in the name of saving 25 or 30 or 40 basis points in the short term, we're running serious risks. Even if our actions lowered long-term risk-free rates for a time, and we got a pop—and I suspect we would get a pop—it does strike me the spillover benefits to lower rates on a broader range of securities are likely to be small, probably smaller than the models would suggest. The availability of financing is unlikely to change by virtue of our actions. Our actions don't appear to me to change the universe of institutions or the universe of assets that are financeable, and credit markets would not open to anyone or anything new. The best that could be said is that we are lowering rates on riskier securities by a very small fraction, and that amount is likely to be overwhelmed by daily moves in risk premiums, as has been evidenced in the last few days, with costs that, as I mentioned, could be quite large.

With respect to the U.K. example, which has gotten quite a bit of attention overseas, I think there's a little less there than meets the eye. My own sense is, this is more a story of liquidity, by virtue of the government entering markets that are considerably less liquid than Treasuries, and it's also a bit of a story of a much more activist central bank in the U.K. than the markets had become accustomed to. So I think that's probably playing some role as well.

In light of the choices we have, I think it would be preferable at this point to increase our emphasis on mortgage-backed securities, as has been described. I think we could continue to argue that that is solving a very serious problem, which is that market functioning is still more impaired in that market than we think is ideal. They are wards of the state, yet they are trading as very poor, imperfect substitutes for the Treasuries. I think that would be a better option to take at this time. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. About asset purchases, I agree we should do more now. The monetary base has declined by $200 billion in the last couple of months. That was unanticipated, at least on my part, and the outlook seems to have worsened. So, if anything, we should be moving in the other direction.

I have a concern I'd like to discuss first about how we go about this. We have these demand-driven credit programs that are having a big influence on the base. We've talked for two meetings now about different points of view about whether it's credit programs and our asset side or whether it's our liability side and the monetary base. We've talked about credit frictions, and we've talked about the demand for bank reserves. I think if we're honest with ourselves, we admit that we as a group don't have a clear view—we haven't decided between these two theories. Policy robustness suggests acting as if either could be true. In this instance, the two don't conflict; they coincide. Both a focus on the base and a focus on the credit programs suggest we do more now because the economy has weakened in the last couple of months.

What that perspective suggests to me is two things. First, that in the materials we distribute before the meeting (this is something I have discussed with our secretary) it's hard for me to evaluate alternatives that differ in the size of one program on our balance sheet—the

SOMA—without having a sense of what's happening to the rest of our balance sheet. There's a substantial amount of uncertainty about the TALF, about the CPFF rolling off, and so on. It would make more sense, at least to me, for us to evaluate alternatives in terms of where the base is going to be. And this perspective of thinking that the base matters is one that leads me to think that maybe we should specify policy in terms of the base.

The second implication that it suggests to me is that we might want to direct the Desk to ensure that the base does at least something—that it at least achieves a certain level or that it doesn't go down in the intermeeting period. We could set an objective and say, "By the next meeting the base goes up by at least X." Such a line in the directive wouldn't conflict with any credit programs, but it would direct the Desk to offset any unanticipated falls in the base due to a running off of the credit programs. This is something I'd like to see us consider and talk about tomorrow.

More broadly, I like President Bullard's idea—and I think that's the way we ought to think about this—that we've got to vary what we plan to do with the base in response to economic conditions, as in a sort of a reaction function. I think we're kind of groping toward this. What the New York staff did in forecasting the base is a great start, but it's a little hard to get a handle on such a large aggregate number so far ahead. I'm not looking for daily or weekly forecasts of the base—that would be a little overkill. But something with a bit more granularity on the time scale might be useful. I recognize there's a lot of uncertainty about what these other contributors to fluctuations in the base are going to do in the near term, and we ought to take that into account. But I think setting a floor for the path for the base in the near term has some usefulness to it.

About mortgage-backed securities versus Treasuries, I have a preference for Treasuries. The reason is twofold. I was asking Ms. Mosser about flexibility, and I thought that maybe intervening in Treasuries would be a little more flexible than in agencies. But, more broadly, I worry about the exit problem, and I worry about the optics of a situation in which, when the recovery begins, we're holding a huge portion of the Fannie Mae and Freddie Mac securities, and we're contemplating selling it off in order to tighten monetary policy. I worry about what elected political officials will have to say about that and what pressure they might bring to bear on us to forestall selling off a big agency portfolio. I think we'd face much less pressure with regard to Treasuries, appealing as we would to the 1951 accord.

About FX swaps, I have very mixed feelings for live institutions. I'm very concerned that the presence of it, which the banks would obviously come to be aware of, would diminish their incentive to inoculate themselves against the circumstances that would give rise to their need for it, despite the best efforts of our supervisory staff to ensure they pursue those inoculations. I think Case 3 is persuasive in conjunction with the closedown or windup of a large institution. So I'm willing to reluctantly support it. I think we ought to be transparent about it, as President Rosengren said.

About an accord, what you've outlined is not my ideal accord. I don't think that the credit-risk-free line you've sketched is a bright one. I think that the price that we're paying is pretty high in terms of using the TALF to fund what in early February was announced as something that would be funded by the FDIC. Bank rescues, I think, are worthwhile; buying toxic assets is very worthwhile. I think it's very important that it gets done. Something clean and simple and uncomplicated has much to recommend it, so I find myself supporting President Rosengren on this, for some straightforward program.

At the last meeting, we talked a lot about the TALF. I won't rehearse the things I said then about it, but I'll note now that to some extent what we're doing is recreating leverage. I thought that there's at least a case that a lot of what went wrong in the last decade was excessive leverage. And if you think too-big-to-fail is a problem, it's a problem because it leads to excessive leverage. We seem to be trying to restore the status quo ex ante conditions in credit markets by restoring the same extent of leverage, and I'm not sure that that's the right philosophy. I'm not sure that we can have a lot of confidence about the incentives of the private participants in the partnership. Are their incentives going to be to price it cleanly or to overpay because they have the downside put to us? I'm not sure I see analytically how that works out.

I'd like to get rid of the ring fences very soon. I think New York has executed theirs. We in Richmond have not executed ours. If there's any chance of relieving us of having to execute that legal document, I'd really appreciate it. [Laughter] But I'm not getting my hopes up, obviously. I take it that this would require congressional action to authorize the Treasury to take this?

About Fed bills, I agree with President Plosser that it's something that would weaken our ability in the future to resist entreaties to provide funding for something that the Administration would rather not go to the Congress for. This is not a comment on our current political independence. I'm confident that you've undertaken everything that we have discussed in making a full independent judgment about what was worthwhile for the Federal Reserve. I just worry about future political leaders and the situation we could find ourselves in one day.

About resolution techniques, it has always struck me that there are two things that get talked about there in one bundle: One is technical legal provisions of conservatorship authority and the laws around resolving them, and the other is funding. We have a model that works with banks, and the funding of that is pretty transparent. I'd rather not get us involved in similar resolution funding for some other types of institutions. Let me just point out that the original accord gave us independent control over our balance sheet, and I'm not sure this really restores that. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Mr. Chairman, let me give my comments on expanding our balance sheet by first saying that I agree with those who have said, and I think you have said, that we cannot get the economy going until we get the banking and intermediation process fixed. And I think that's an important premise for going forward. That means we need to focus on resolution, and I think this proposal that's being worked on using the TALF and using us to help finance a bad bank is actually going to delay dealing with this very serious problem. Given the comments that President Rosengren and others have made, I think we have an opportunity to get this done with some legislation that would create the ability to put some of these holding companies in receivership and move forward, so that we can get the banking system fixed on a sustained basis.

I think that's important, because I am very concerned about the TALF and growing our balance sheet, even at this meeting. I think we should pause, because we have the TAF, we have other means to provide liquidity, should it be needed, and we have excess reserves that are sizable. I think we should focus on fixing the banking system and conserve our balance sheet carefully. I wouldn't want it necessarily to decline dramatically, but I don't think it would with the TAF, and so forth; we have the mechanisms to provide liquidity.

But if the majority decides to go forward with it, then I do prefer mortgage-backeds to Treasuries. I disagree in a sense with President Lacker because I think it would just open us up to charges of monetizing Treasury debt. And my experience is that it doesn't matter if you're holding mortgage-backeds or Treasuries; when you try to sell them off your balance sheet, interest rates go up—it doesn't matter; people are going to be upset. So we're better off with mortgage-backeds because it makes a cleaner line for us to say we are not in that business.

I also want to talk about excess reserves and Fed bills. I think that, as the banking industry itself has learned about excess reserves and the payment of interest, it is learning to arbitrage. From a governance point of view and from a simplicity point of view going forward, if the FOMC were made the party responsible for setting the interest rate on excess reserves, we would set the floor and control the fed funds rate. You don't need Fed bills if, in fact, the banking industry has learned how to arbitrage it. I agree with President Plosser—getting us into issuing bills or in a so-called cooperative relationship with the Treasury, where we're taking Treasury bills, is a very tenuous path for us to go down, and I'd stay away from it. I think paying interest on excess reserves would go a long ways to managing our balance sheet, or, I should say, our ability to control the fed funds rate.

On the swaps, I understand where they're coming from on that, and I take that pretty much as a given, but hopefully it will be carefully managed and not easily accessed by the institution that needs it. Thank you.

CHAIRMAN BERNANKE. On the interest rate on excess reserves, I think it's coming to play the same role as the discount rate. If the FOMC set a target for the federal funds rate, that would essentially determine where the interest rate on excess reserves would be, analogous to the discount rate. I think that analogy will hold up pretty well in the future. President Fisher.

MR. FISHER. Mr. Chairman, I want to comment on the additional asset purchases, principally. I fully agree with Governor Warsh—in fact, I think he understated the case, and that is that I don't think it's advisable to purchase Treasuries here. I've sent a note around about that.

For the record, I just want to repeat some of the arguments in there. To my knowledge, there is no liquidity problem in the Treasury market. There are no obvious signs of a breakdown in arbitrage across maturities, unless Trish tells us differently. The spreads between high-grade private issues and Treasuries do indicate that the markets are not functioning normally—I take that for granted, and you can see it every day—but that doesn't mean that lowering long-term Treasury rates will affect private sector rates. I do worry about the perception—and it's palpable—that we will be succumbing to political pressure to monetize the exploding borrowing needs of the Treasury. Trish, you gave us some numbers today—if I add them correctly for the fiscal year 2009, it's around $2 trillion. It's an inordinately large number. I'm preparing for a trip I am about to make to Asia, and I do think that there's a lot of sensitivity about this there. (I'm not sure if that is whom you were referring to in your reference, Governor Warsh.) If we are viewed as the handmaiden of the Treasury here, I believe you might have a negative reaction, not a positive reaction. If the majority decides in favor of increased purchases, I support respecting President Hoenig's view. I would prefer that we purchase GSE securities—the number is somewhat arbitrary, Bill, as you pointed out. I would do it by size, or at least announce that we could go up to a size. The one thing I would caution against is giving a specific date, unless we are absolutely certain we can meet that date.

I want to make a general point here. There is a lack of confidence in the marketplace. There was reference to that before; we see it with everybody we talk to. Confidence is a function of competence, and I think we should exercise our muscle where we have proven ourselves quite competent. We have proven ourselves quite competent, for example, in the commercial paper market, and we are proving ourselves quite competent in the mortgage-backed securities market. There's a question mark out there on the TALF—we're not quite sure. And it's not because the staff isn't making a great effort—we're just going through this new process, and it has become enormously complicated. I want to play to our comparative advantage. No question we could buy Treasuries—I don't think that's the issue—but I disagree with that for other reasons. But I would support an expanded program on mortgage-backed securities, because we are competent in performing in that area.

On the issue of the swap lines, I agree with the comment that this is procedural. I think we have to be very clear in expressing this. I do worry that it may become quite evident to some that we're doing this for one particular institution, and I think you could have retribution in terms of price reaction vis-à-vis that institution and the rumors about others. But as long as we keep that in mind and express it clearly, then, were I a voter, I would vote to proceed.

On the issue of Fed bills and special Treasury issuance, initially I indicated that I would be against the issuance of Fed bills. I'm somewhat more enlightened now that the maturity that you described is in terms of one year or less. I have been worried that a CDS market would develop around the Fed, which would be a negative development, particularly if there was a long maturity. I still have doubts about the concept. I'm not as clear in my own mind, as President Hoenig just expressed, as to the alternative, but I do worry about the eventual assumption that we might grow that program rather than rein it back in. Therefore, if we were to proceed with issuing Fed bills or an alternative, I would want to have a clear sense of provision. Otherwise, I think the expectation would be that we would continue to expand the program, and, therefore, give rise to these doubts about the further purchase of Treasuries. Thank you.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Thank you, Mr. Chairman. Let me just comment on three or maybe four issues. First, with regard to asset purchases, I don't have a conviction about the magnitudes, but

I would diversify the purchases by adding Treasuries. I suspect that the preponderance of our purchases would still be mortgage-backed securities, but both because it puts us in a better position when it comes time to unwind and because it may turn out to be effective, I would certainly start to purchase long-term Treasuries. I'm not worried—I could be dead wrong about this—about great concerns about collusion or funding exploding federal debt. These are unusual and exigent circumstances. People would understand what the intent of the program is, in my judgment.

With regard to the TALF—as initially described, I thought, and I think, it has some promise. The way I saw it, you have some markets that are not working—there are no prices. One of the things we learned from the Japanese experience, the Depression of the '30s, and some other episodes is that you need to have resource reallocation occur. We've got to move resources from places where they're no longer needed to where they are needed, and you can't have that happen without prices. So we need to get those markets restarted, and I'm in favor of the TALF as described. I would stay away from legacy TALF; funding the bad bank is a close cousin to being the bad bank. That's the job of the Congress and the Administration, and of course, they're not going to be quick to pick that up if we're willing to do it. But it seems to me we've got to make a stand somewhere with regard to this, and this seems to me to be a very clear and direct place where we ought to do that.

Finally, with regard to Fed bills or SFP, what troubles me about that is that from one perspective it could be viewed as circumventing the debt ceiling, and I don't think we want to put ourselves in that position. If we say to the Congress, "Understand that this is one of the effects of passing this legislation," so that everything is on the table, then I'm not troubled by it. But if we're not that transparent, then I would also stay away from that.

CHAIRMAN BERNANKE. The legislation explicitly says it. It makes no sense to have the SFP, in particular, if it's subject to the debt ceiling, because then we would not be able to use it.

MR. STERN. Okay. So long as that's understood.

CHAIRMAN BERNANKE. Yes. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I have a few brief comments on the various issues. Starting with the swaps, I support the staff recommendation. I think it's a prudent step. There were two possible draft resolutions. I think I would favor the greater transparency of A, but I don't feel strongly about it and could support either.

Then just a brief comment on the banking system. I think it's essential to fix the banking system for exactly the reason that President Hoenig and others emphasized. I think we will not get recovery until we have a strong, healthy banking system with good banks that can attract capital. I would really love to see this done in the most transparent and straightforward way, namely, creating a good bank–bad bank type of framework. I agree fully with President Rosengren's comments—I would not make this a matter of optional sales of some portfolios of assets by banks that wanted to do it into a facility. I would go in and much more aggressively, as he suggested, force write-downs on the value of these assets. We have a great opportunity to do it after the stress test is over, and I would push these institutions into spinning off their operations, in the cases where it is needed, into a good bank–bad bank structure. If we had legislation that allowed for the resolution of systemically important financial firms that aren't banks, that would be much easier—to give us the power to push firms without necessarily having to put them into a conservatorship, but to take those steps. So that's what I think would be ideal, and I think it's important for economic recovery. I understand it's expensive, and I understand it's hard to go to the Congress to get the amount of capital that's needed. I think the FDIC facility is a move in the right direction. I prefer it to what we're doing now. It's not ideal, but I think it's a step in the right direction.

On the legacy TALF, I have issues similar to those that President Stern enunciated. I'm not dead set against it, but I do have qualms about our becoming involved in that business.

On the purchase options, I certainly see the benefits of additional purchases of MBS, especially given that there's going to be a step-up in issuance over the next couple of months in connection with refinancing of mortgages. The spreads are still high, although they've come down, and it seems to me that the expansion of that program could have a beneficial effect on the housing market and the economy and on bringing long-term yields down more generally, since other long-term assets are substitutes for mortgage-backed securities. I worry a little bit that they're harder to unwind than Treasuries, but, still, it's something that I would be very supportive of going ahead with now. Bill mentioned a number much higher than I had envisioned. I don't know what the right number is, so I'm quite open on that. I would be supportive of going ahead with purchases of Treasuries at this point, as well, on various grounds. One is that the economy is just a disaster area. The economic outlook is utterly dreadful, and we have said we stand ready to do absolutely everything that's needed to support the economy. We have let some time pass without doing anything, and in light of the outlook I would want to do everything we can. I thought the staff memos made a good case for the idea that the Treasuries and MBS purchases would have favorable macro effects, and I understand the concern about "what are we doing monetizing the debt?" That's quite a legitimate concern, but, on balance, I come out in the same place as President Stern—I don't think we've lost our independence, I think people realize these are unusual and exigent circumstances, and taking a step like that now is a favorable thing for the economy. So I am supportive of A and am very open-minded about magnitudes.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Let me hit some of these subjects as well. We're in a position where doing the right thing is not obvious. We're in a second-, third-, or fourth-best situation, and I think we've got to make the best of what we're doing, given all of the constraints. It puts us in a very difficult situation.

I would include the swaps in that. I would be in favor of going ahead because I think we need to have this in our arsenal. But I do worry about the announcement effect and whether, as several people have pointed out, markets will figure out this is really about one institution—otherwise, why are we doing this now? We don't have the situation we had when we put the other swaps into play, in which there was generalized pressure on the markets. So I guess the head of your transparency subcommittee is for being a little less transparent. [Laughter] I could go either way on it, but I would prefer alternative B in that case, just to downplay it a little more because of the announcement effects. I think we need to put it into play either way.

On the Fed bills and SFP, I wish I believed that the rate on excess reserves would work, but I don't, and I think we've seen evidence that it doesn't work. Banks are capital-constrained, and all of us are talking about further substantial increases in our balance sheet. Some people are concerned about whether those increases in the balance sheet and, in effect, monetizing the debt, will have inflationary effects, and I'm concerned that all of these assets end up being excess reserves in a banking system that's capital-constrained (and I know there's no risk weight on these reserves, but they are part of the leverage ratio). I think having Fed bills or SFP will alleviate those concerns and will reduce some of the constraints on our actions now because it will take the funding of those actions outside the banking system and will give us a clear framework for an exit when we need to exit. So I'm strongly in favor of pursuing those. I recognize the political potential here, but I think in this situation, that's a lesser risk than the risk that we don't do everything that we should be doing because we're worried about the exit.

On legacy assets, I agree that a clean, simple program would be much better than these three complicated, interrelated things that are hard to explain. You did a great job, Mr. Chairman, but it's hard to understand how they relate to each other. I think we're hung up on two issues. One is pricing the assets for a going concern. This is unlike the S&Ls, where the RTC just got the assets because the S&Ls collapsed. All the RTC had to do was worry about auctioning them into the market. Now we've got to worry about the price at which we're taking them from banks that are going concerns and, partly because we don't have a resolution regime, from bank holding companies that are going concerns. So we really have no choice—we don't have a legal way of putting them out of business in a controlled kind of way. Related to that is the second issue, the amount of TARP capital available. When we write these assets down, it's going to leave huge holes in the balance sheets of some banks, and there's the TARP capital constraint. I wish neither of these were constraints, but they are. So, I think, given those constraints, we should probably go ahead with the legacy TALF as long as the total TALF doesn't go over that $1 trillion mark.

On asset purchases, I agree with the others who have said the economy is very weak. This is a serious situation. It's not obvious that the TALF and these other indirect ways are having that big an effect—I think they'll have some effect. What we do know is that direct purchases of assets from the market have been very effective in the commercial paper area and in the MBS area. Where we do not fool around with all of the indirect SPVs, we can have an effect, and we need to do that. Apologies to Bill Nelson—he's doing a great job. But it would be much easier if we just bought the securities, even at market prices, rather than going through all of this circular financing. Particularly with the constraint on the funds rate at the zero bound, we need to use all of our tools, and asset purchases are the most effective tool we have right now, so I would definitely buy some more MBS. Like President Yellen, I'm not sure exactly what amount, but I would certainly at least continue at the current rate you were talking about, Mr. Chairman.

But I would buy Treasuries also. It really concerned me over the intermeeting period that there was this generalized tightening of financial conditions at a time when the economy was weak: Among the things that tightened was the risk-free rate, and corporate rates went up pari passu, more or less, with the risk-free rate. Having seen Treasury rates rise while the economy was sinking was a very troublesome thing to me. It felt like financial conditions were tightening at exactly the wrong time. So I think we need to lean against that tendency in a very visible, transparent way. I think buying longer-term Treasuries is the way to do that. I think it will work in the sense of lowering interest rates. I think the table that Joe showed us was telling, where all of these announcements have had the expected effects on interest rates—it's not basis point for basis point. Like President Plosser, I'm a little surprised that these announcements would have that effect, given that the markets are very, very liquid. But that's what the data show. Also, in every case the exchange rate moved in the expected direction. So buying Treasury bonds would not only lower Treasury and corporate rates, but I think it also would take some of the pressure off the appreciation of the dollar, which has been part of the tightening of financial conditions. I think the Treasury will issue securities across the maturity spectrum, because they're concerned about their debt management over the long run. So, in effect, I think by buying Treasury debt, we're financing the deficit with either reserves or Fed bills. We're changing the relative supply of long- and short-term assets, and that's one of the limited tools we have when the federal funds rate is at the zero bound. I think we ought to be using that tool. I think right now we need to make sure that fiscal policy is as effective as it can be. So monetizing the debt to me is not a negative under the current situation, because it's helping fiscal policy be effective—provided we can do it in the context of not having rising inflation expectations and not having concerns about our independence. I think these announcements haven't had an adverse effect on people's perceptions of our independence. In the context of pursuing a framework for Fed bills and SFP—so we're actively thinking about the exit strategy at the same time we're buying the bonds—and in the context of our longer-term projections and strengthening what we say about inflation expectations, I think we can buy the bonds without concerns about raising inflation expectations. The program will underline in a very visible way our expectation that interest rates are going to be low for a while. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thanks. Vice Chairman, did you have a two-hander?

VICE CHAIRMAN DUDLEY. I just had a question about the liquidity of the Treasury market. People have said a couple of times that the Treasury market is really liquid. I don't really think it's all that liquid. Trish, did you have a comment?

MS. MOSSER. It's more liquid than anything else. [Laughter] But that's a pretty sad statement at this stage. There are, in fact, huge price gaps between the different pieces of the Treasury curve. One of the things we do by going in is actually to improve liquidity, particularly at the long end, and hopefully help to bring down yields that way as well. It is interesting—and this is a point I made in my presentation—that our presence in the mortgage-backed securities market, particularly the large presence in the TBA market, which is the forward liquid part of the market, has improved liquidity tremendously, according to the asset managers we've been using. I think our buying Treasuries would hopefully have some effect there, too.

MR. FISHER. Can I ask a question about that, Mr. Chairman?

CHAIRMAN BERNANKE. President Fisher.

MR. FISHER. The 10-year rate has sort of altered between 2.70 and 3.00 percent. Is that correct?

MS. MOSSER. Yes.

MR. FISHER. And when we talk about buying Treasuries to bring rates down, give me an order of magnitude. Are we talking about going back to 2.70? Are we talking about 2.50? Let's say we did something in size. What would your expectations be, just so we have a reference point for this discussion?

MS. MOSSER. It partly depends on where we would buy. I don't want to get too technical here, but I think we'd probably start not with the rates you see every day—the on-the-runs—we'd probably start with the off-the-runs where we can improve liquidity. Normally as the off-the-runs come down, part of that would be the spread to the on-the-runs that would come down as well—hopefully it's low.

We would move across the curve. I think the strategy—which we're in the process of working out, because we weren't so sure that we were going to be doing this—would be to start there, but to go to recently issued securities, where there's a little bit of liquidity but not a lot. In terms of the size of the effect, honestly, I don't think we have any better estimates than the ones that Joe gave you. We're guessing there would be a very large announcement effect, of the order of magnitude that Joe said. Once we got going—let's say it's $500 billion, and people figure out how much per week approximately we were going to do—we'd move back and forth across the curve. We would announce in advance approximately over a course of weeks what tenors of the curve we would be buying—not exact days and exact amounts, because we don't want to get front-run that badly, but we'd want to give folks a sense of where we were going. If we thought there were particular distortions in one part of the curve, we would focus more there. So we're doing something somewhat analogous to the way we are managing the MBS program: We don't have an explicit target, but when both retail rates get high and mortgage spreads get high, the investment managers know to buy more, and we would take the same approach.

MR. FISHER. But we would expect we'd still have a positive-shaped yield curve, obviously.

MS. MOSSER. Absolutely.

MR. FISHER. It would still be fairly steep.

MS. MOSSER. Absolutely. It would still be steep, but not as steep as it is now.

MR. FISHER. If my memory is correct, it does help bankers to have a positive relationship. Thank you.

MS. MOSSER. Yes, and it's typical

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. I'd like to ask what you mean by "improved liquidity" in this context because we use that term a lot. There's a market, there are some sales, there's a bid and there's an asked, there's a certain flow. We come in and we buy a lot. That increases the volume. Then afterwards, the price is presumably higher. When you say "liquidity is improved," do you mean there's increased the volume because we added volume by purchasing a bunch, or do you mean the bid-asked spreads are lower? Or do you mean the price is higher?

MS. MOSSER. Bid-asked spreads, trade depth, how much size of a trade you could put through, how easy it is to hedge.

MR. LACKER. So even apart from our volume, other people's volume is higher.

MS. MOSSER. Correct. We want other people to follow us in. Our volume alone is not going to do it. That's clear. If others don't follow us in, it won't work. What's interesting about the MBS market is that volumes were low, bid-askeds were very wide, and daily price volatility bounced all over the place. So if you actually wanted to sell any mortgages, it was very hard to figure out where they were going to price. What has happened since we have come in is that others have come in after us, because our managers add a little stability—if the price gets too high, they buy a little more that day; they buy less if it's a little low. So they temper their purchases on a day-to-day basis. I don't know if we'd do it literally day to day for Treasuries, but we would do it over time.

VICE CHAIRMAN DUDLEY. Think about it as: Volatility comes down, therefore the risk premiums will come down as a function of lower volatility. And that's what brings rates down.

CHAIRMAN BERNANKE. Okay. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. Given the deterioration in the outlook, I do believe that aggressive policy action is needed. I came to the meeting prepared to support alternative B, primarily because the simulations that the staff provided indicated that purchasing mortgage-backed securities gave us a bigger bang for our buck than the purchase of Treasury securities. However, I am willing to consider the purchase of Treasury securities. I listened to Vice Chairman Dudley's comments about the fact that the TALF is slow to get up and running and that we don't have experience in the purchase of long-term Treasury securities. So I do support the expansion of the purchase of mortgage-backed securities and the increase in agency debt purchases, but I am also willing to be open-minded about the purchase of Treasury securities. Regarding the extension of the TALF, I am concerned that we are not being clear about our objectives. Some of the questions we had around the table today indicate that. So I don't want our periodic announcement of additional classes of securities to be interpreted as if we are just being reactive. I think that if we do move ahead with the expansion of the program, then making our objectives clearer will help the public understanding and help build confidence around the program. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. There are two sorts of questions I'd like to address and tell you where I think I am and where I might be tomorrow or the next day after that. The questions are, first of all, the expansion of the balance sheet. Should it be bigger than it is? I'm not opposed to expanding the balance sheet. I've never expressed much opposition to it. What's not clear to me is whether we have the right set of metrics to help us judge how much expansion we need and what the right tradeoffs are as we do it. In that regard, before I go any further, I want to thank the staff. I've been raising some of these questions off and on. The New York staff and the Board staff have presented an incredible set of memos for us this time, and I just want to thank them a lot for their efforts. They're really working hard to try to address these questions, which are very challenging because they do not have easy answers. It's much easier to ask them than it is answer them, and I appreciate that fact. I do think, though, that we need some better metrics to think about what it means to expand the balance sheet. I'm very sympathetic to President Lacker's view that maybe we ought to think about what's the size of the monetary base or the size of the balance sheet and set some bounds on it and how we think of measuring that. Improving on metrics in that regard would be very useful. Also, in terms of the size of the balance sheet, thinking about why it ought to be bigger or smaller and what the appropriate magnitudes would be may help us think about what the composition of that balance sheet is going to look like. So I think we need to think about the size first of all.

The second issue is, if we agree to increase the balance sheet to whatever size we want it to be, then we need to think about its composition. Should the increase be in Treasuries? Should it be in mortgage-backed securities? Should it be more TALF? And here I'm a little frustrated because I find myself, as I've said before, worried about credit programs and fiscal policy issues and other things. But even stepping away from that, it seems to me that we do these various programs on almost a one-off basis. I think one of the challenges we face is getting some grasp of how these programs are benefiting us at the margin. We're always taught that you do things at the margin. So you want to equate the marginal benefits of the different programs that we're trying to be involved in, regardless of our debates on other points about them.

One of the things that I think we should also think hard about is how the different programs interact with each other. I raised the question last time, when we talked about extending them, whether maybe we could get rid of some of them, whether maybe they're not doing what we thought they would do. How does the commercial paper program interact with the Treasury's guarantee program, which interacts with the AMLF, which interacts with the MMIFF? In trying to get, as I think the Chairman said last time, some rationalization of these programs, I'd ask where at the margin we're trying to get some benefit from each of these and how do we equate them across that.

I worry a little about the consequences of our pursuing programs where we become the lender of first resort rather than the lender of last resort. One of the things we want is to have our benefits spread across, or marginally equated across, programs. But I worry about the consequences of our participation in some markets, where we either are the market or we're making ourselves the market by what we do. I think that's something that we have to be concerned about. We have to worry about the anticipation that other players won't be in the market, as long as we're there. Looking a bit beyond just the direct impact: Are we discouraging participation? Are we trying to revive markets that maybe shouldn't be revived? Indeed, by trying to keep certain specific markets in place, are we impeding the marketplace's search for other credit-allocation or capital-raising mechanisms? So I think we have to worry about the endogeneity of the performance of these markets with respect to the decisions and plans we make.

That brings me back to President Bullard's point about having a plan and having a path. I think it's very important, and it interacts with this notion of the degree to which we're creating problems for markets or solving problems in some of these markets. Not knowing what our path of actions is going to be over the future, I think, is a source of uncertainty in the marketplace. The way I think about it is by trying to get to answers for questions like: What do we think the size of our balance sheet ought to be or what should its path be? How do we equate the marginal benefits from each of these programs to achieving that growth, knowing full well that if we don't articulate what our strategy is and how we're going to end when we enter markets, then we can actually increase uncertainty and volatility rather than reduce it? We have to think about those choices.

How does that play against the TALF and Treasury bills? If we're going to expand our balance sheet—and, again, I'm not convinced that we need to, but I'm not necessarily opposed to it—I do lean towards Treasury bills for a couple of reasons. I worry about the knock-on effects that I was just alluding to about TALF programs at the margin and the various other programs that we have. I'm uncomfortable with not having more Treasuries on our balance sheet; I think Treasuries would help our exit strategy at the end of the day. My view of buying Treasuries, though, is really about the composition of our balance sheet and not about trying to drive down long-term Treasury rates. Of course, in this environment, where it's essentially a zero interest rate bound, buying short-term Treasuries is sort of a swap, and economic theory tells us that's not going to help us very much. So we end up being forced into buying longer-term assets. But my first concern is getting a better balance of Treasuries versus all this other stuff on our balance sheet. So I'd be inclined in favor of buying Treasuries. It doesn't mean I'd be opposed to buying more MBS at some point in the future, but we haven't gotten to the $500 billion level yet, and we haven't articulated a path. So I'd wait until we got a plan together to articulate this path before we announced additional purchases of those types of assets.

Like President Stern, I'm not a big fan of doing the legacy ABS through the TALF. I'll treat the bad bank model separately. But expanding the TALF to legacy stuff is going a little too far. Again, I worry about us becoming the lender of first resort, and I'm just not sure that's where we want to be.

On the bad bank/good bank—President Stern made this point—I'm not sure that ought to be our business or that we ought to be funding it. I think that should be a Treasury issue, and if we can avoid being in that business, I would prefer it.

CHAIRMAN BERNANKE. We're not funding the bad bank.

MR. PLOSSER. But we're taking on the assets in support and providing the liquidity through the TALF to do that. I'd rather let the FDIC program work than have us augment it.

But let me move on to the other two issues. On the resolution mechanism, Mr. Chairman, I think you've been very clear about it; in fact, people in this room, myself included, have been talking about this for almost a year. We need to get on with that, and it's very critical. I think that's going to help us a lot, so I support that effort.

As to the accord, I shared a memo about it with the Committee. My views there are pretty clear. They really haven't changed. I do think that it's important that the accord as I proposed it be about keeping our balance sheet much more pristine and about the exit. It had its antecedents in Al Broaddus's and Marvin Goodfriend's work and even was a recommendation of the financial stability group of the G–30.

But I do think that it's a form of constrained discretion. If we don't want to be in the business of doing fiscal policy and we want to discourage the Congress from coming to us to engage in fiscal policy, then we want to make it easier for us to say "no" in those circumstances. I think, Mr. Chairman, you've done a terrific job in this; in the example of the Congress talking about funding the automobile companies, you were very clear that that was not our business. We want to discourage those kinds of requests, and my concern is raising the threshold for saying "yes." What worries me about the Fed bills option, as opposed to the supplemental financing securities, is that the Fed bills option is going to make it easier for them to ask us to do things. I think of it as giving us an almost incredibly unconstrained discretion to do fiscal policy or to be asked to do fiscal policy. And that may ultimately become a lack of independence, not a source of independence. That worries me, because, at some point down the road—maybe ten years, fifteen years, whatever—if the Federal Reserve became more politicized than it has been in the past, it might be much more susceptible or much more responsive to a claim that "we have to coordinate monetary and fiscal policies, and therefore, Federal Reserve, you should issue some

Treasury bills on our behalf and do some things to help coordinate policies." That probability may not be large, but it would be a very bad outcome for the institution, and I think we should do all we can to resist being in that spot. The sunset provision, Mr. Chairman, as you suggested, may provide us some protection against that, but if the sunset provision comes along and we've issued Fed bills in the past, then it might be easy for them to want us to do it again. So my current feeling is, if I cannot get a true accord, as I advocated in my memo, I'd prefer the supplemental financing program to be conducted as needed. If we think we need that sterilization capability, I'd rather go that route. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. The time is late, and in the interest of time and in response to the body language I see around the room, I'm going to limit myself to talking about the asset-purchase question. I came here favoring growing the balance sheet with more asset purchases principally because of the deteriorating outlook. A lot of good arguments have been made on both sides, whether it be Treasuries or an MBS program. I, on balance, favor the MBS approach for reasons a number of you have articulated, particularly Governor Warsh. But I would like to focus my remarks on a dimension that has been touched on, but perhaps not explicitly addressed, and that's the communications challenges. In lots of conversations over the last few weeks, particularly with directors and so forth, I get the increasing sense that we have big communication challenges, and they are part of the problem. There's a lot of confusion and uncertainty regarding how we're making our decisions, what comes next, and how it all fits together as a total policy set.

I think we need to consider favoring programs that are already in place. Simplicity, I think, counts in these circumstances. I would argue that it may be better to err on the side of "no new stuff" if we can, to be as concrete as we can, to try to explain the decision framework that we are using, and to try to repeat a holistic explanation of policy going forward. So I think a consideration in the decision is the question of communication. President Fisher used the term "confidence." President Bullard talked about "path." President Plosser used the word "uncertainty." This all comes together to me as one more element to take into consideration, which is: How do we communicate it clearly, so the public, particularly the business public, understands?

CHAIRMAN BERNANKE. For those who have talked about rates, would expressing purchases in terms of monthly rates be of any help? I haven't yet heard a specific suggestion about how to do that. Something like, say, "the Desk will aim to buy $80 billion a month of mortgage-backed securities."

VICE CHAIRMAN DUDLEY. You'd want it conditional on the financial conditions. In other words, if things got worse, you'd want to accelerate the rate, and similarly, if things got better.

CHAIRMAN BERNANKE. I'm looking for a concrete example. I'd be more than happy to try to accommodate this kind of language if we can figure out how to do it. Brian is already worried about missing dinner, I'm sure. [Laughter]

VICE CHAIRMAN DUDLEY. He's worried about missing going to bed today. [Laughter]

MR. LOCKHART. Let me think about the question overnight, and I'll come back with an answer tomorrow.

CHAIRMAN BERNANKE. Okay, good. We'll discuss that in the morning. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. Mindful of the fact that I'm now the major impediment between the Federal Open Market Committee and dinner, I will follow President Lockhart's lead and confine myself to comments on the large-scale asset-purchase issue. But could I ask Trish a couple of quick questions beforehand? One, Trish, you said earlier something about the equivalent of absorption capacity, or I guess it's actually going in the other direction, the effective limit on MBS purchases.

MS. MOSSER. And the number was—this is our best guess—an additional $2 trillion of mortgage-backed securities, that might strain it.

MR. TARULLO. Okay. Second, you were working with the half trillion figure for government securities, which had been put in the Bluebook. Is there a minimum figure below which a palpable impact wouldn't be felt?

MS. MOSSER. That's a very hard question to answer. I am concerned that a very small quantity would be seen as ineffective, and part of this is about the announcement effect, not to mention the liquidity effect. Could it be less than $500 billion? Yes. We calculated about how much we would have to buy every week, and we'd go in two or three times a week with several billion dollars every time. So these would be sizable transactions from our perspective. It could be scaled back a bit, but I wouldn't want to put it at $100 billion or $200 billion, not over a nine-month period. I'm afraid it wouldn't be effective.

MR. TARULLO. Okay. Thanks. So, somewhat informed by those helpful answers, here are my views as they now stand. First, it seems to me that under current circumstances, for the reasons many of you have stated, the risks for us are in doing too little, not in doing too much. That leads me to the predisposition towards a large figure, at least as large as the Option A total that was included in the Bluebook, and, as Vice Chairman Dudley has suggested, perhaps larger than that as well. Second, it seems to me with respect to the issue of the proper number—how do we know where we are going, how do we know how much is enough—you all have for some time been, and now I'm joining you, navigating in waters in which there's not a particularly good map to follow, so it's necessarily a matter of making judgments based upon what appear to be still seriously dysfunctional credit markets and a serious absence of liquidity and a seriously underperforming real economy. In those circumstances, I feel pushed towards the larger end of the ranges that have been identified as appropriate. Third, for the reason that President Evans stated earlier in the afternoon, my inclination is towards multiple instruments. I've been struck just in my first six weeks here how many times people have commented that correlations or predictions that people might have expected in normal times are now breaking down a bit. We're not entirely sure of the effects of the application of a particular policy instrument, and it seems to me that, under those circumstances, it would be wise to mix instruments that are essentially directed towards the same end. Having said that, my instinct, if it is possible—and this is why I asked Trish the question about minimum purchases of government securities—is for an asymmetric number and an asymmetric emphasis upon the MBS rather than the Treasury securities. Here I'd echo—or steal—some of the points that Vice Chairman Dudley made a moment ago.

Finally, on communications, I have a slightly different, but I think complementary, point to the one that President Lockhart made: If we go this route of including both MBS and Treasuries, I hope we could at least consider giving some explanation in the Committee's statement about why we're pursuing both rather than simply stating "here is the amount of each which we've instructed the Desk to purchase." Thank you.

CHAIRMAN BERNANKE. Thanks. Governor Duke.

MS. DUKE. Now I'm the one standing in the way of dinner. I just want to talk a bit about expansion of the TALF and then also about asset purchases. In terms of expanding the TALF, my concern is about some of the asset classes, for instance, commercial-mortgage-backed securities. I don't know a lot about how those are put together, but I do know a lot about commercial mortgages, and they're much closer to business loans than they are to real estate loans. They're entirely dependent on cash flows of different types of businesses. So if we get into those kinds of purchases and we start to determine the haircuts, we're going to be looking at credit allocation, because we're going to be looking at differences in conditions in different industries and the real estate that supports those industries.

The second thing is that I don't think you can make a bad asset into a good one by taking a larger haircut. If we're going to be taking assets not from banks, but from anybody who wants to disgorge them, then what would keep us from simply moving assets from one hedge fund to another? And I really get concerned that the Fed ends up getting stuck trying to digest every hairball that's out there in the marketplace. [Laughter] That's a technical term, "hairball."

I also worry that when we originally talked about expanding the TALF up to $1 trillion, it was with the understanding that that was conditional upon our getting the ability to issue either Fed bills or the supplemental Treasury securities. That has gotten lost in the discussion of it, and I worry that with a quick announcement on this other facility, the notion would again get lost, namely, that it's dependent upon other things happening.

Finally, I don't see this as a good bank–bad bank situation, and I worry whether we'd have enough left to deal with emergencies if they came up. I'll talk more about this tomorrow, but the more I keep going around and around considering all the things we're trying to do to fix the banking system—while I think it's important—I'm not nearly as confident as everyone else that it's something that we can do. So I keep coming back to thinking that the only thing we can do is to put a floor under house prices. If we could put a floor under house prices, that would also put a floor under bank losses, and I think it's our best chance to get moving in the right direction.

Before I move to asset purchases, I'd like to start with the story of an elderly wealthy gentleman who had taken a young bride and begun to spend money like crazy. His friends got very concerned that he was going to go through his entire fortune, and they elected one of their number to go and talk to him about it. He said, "Sam, we're really concerned. We want to make sure that you know that you can't buy love." Sam said, "I know you can't buy love, but if you spend enough money, you can buy something that looks so close you can hardly tell the difference." [Laughter] So I think if we spent enough money, got enough of a hit right now, it would look like a floor on house prices, and we might have something every bit as good as a floor on house prices. It seems like the best time, when we have the synergies with the housing program, which should reduce foreclosures and should increase the ability to refinance. Both borrowers and purchasers are so incredibly hair-trigger sensitive to what goes on with mortgage interest rates. Mortgage interest rates went down when we made the announcement before, but that was in November, and that was not the season when people buy houses. If we do this in the spring, when there are other programs that would support it and when it's pretty obvious that there's not going to be any fiscal stimulus coming along that would also further support house purchases, then maybe we've got a window of opportunity where we can go in there and put a floor under house prices, and that will start to move some of these other things. And with that, Mr. Chairman, I believe I'm the last one.

CHAIRMAN BERNANKE. Well, I'm certainly glad we avoided a go-round. [Laughter] Before we leave, we have a little bit of business. We have to ratify domestic open market operations.

MR. KOHN. So move.

CHAIRMAN BERNANKE. Without objection. Thank you. We do have to vote on the temporary liquidity swap lines. I heard most people proposing A, which was the more transparent alternative, understanding that there were perhaps some risks to that. Governor Kohn, are you okay with that?

MR. KOHN. Sure.

CHAIRMAN BERNANKE. All right. Would anyone else like to speak on that question? (No response.) If not, do you want to take the roll on the swap lines?

MS. DANKER. Okay. On resolution A from the memo.

Chairman Bernanke	Yes
Vice Chairman Dudley	Yes
Governor Duke	Yes
President Evans	Yes
Governor Kohn	Yes
President Lacker	Yes
President Lockhart	Yes
Governor Tarullo	Yes
Governor Warsh	Yes
President Yellen	Yes

CHAIRMAN BERNANKE. Okay. Thank you very much. At dinner tonight we'll celebrate Governor Kroszner's return, and we'll begin tomorrow morning at 9:00 a.m. Thank you very much.

[Meeting recessed]

March 18, 2009—Morning Session

CHAIRMAN BERNANKE. Good morning, everybody. I guess we're ready now, finally, for the economic review. Let me turn it over to Dave Stockton.

MR. STOCKTON. Thank you, Mr. Chairman. In looking at the myriad ways in which we were surprised by the incoming data and forced by evolving economic and financial circumstances to revise our forecast, I began to think that maybe my wife was on to something when she recently gave me a T-shirt that reads "Mind of an Athlete – Body of a Genius." [Laughter] Well, as you know from reading the Greenbook, we did mark down substantially our forecast this round. We are now projecting that real GDP will fall 2¼ percent this year and increase just 1½ percent next year; those are downward revisions of about 1½ and 1 percentage point, respectively, from our January projection. Given that weaker outlook for activity, we expect that the unemployment rate will rise to 9½ percent in early 2010, where it will remain through the end of the year.

Three principal factors were behind the sizable downward revision that we made to our forecast: first, much weaker foreign activity and a stronger exchange value of the dollar; second, weaker incoming data on employment, production, and spending for the domestic economy; and third, at least as of last Wednesday, a drop in the stock market of about 15 percent relative to our January forecast.

Steve will have more to say about the foreign outlook, but in sum, the projected deterioration in foreign activity and the higher value of the dollar account for about one-third of the downward revision that we have made to our forecast of GDP. But the incoming data on the domestic economy have been dismal as well. Starting with the labor market, private payrolls have been dropping at an average monthly pace of 650,000 since November, surprising us to the downside. Indeed, the level of payroll employment in February was 550,000 lower than was anticipated in our January forecast. And since the February reference week, initial claims have moved up further, as has the level of insured unemployment, suggesting that job losses likely remained appreciable this month. The household survey has shown a similar deterioration. The unemployment rate rose to 8.1 percent in February, nearly ½ percentage point above the level that we expected in our previous forecast.

Measures of manufacturing production also point to a steep contraction in activity. After falling at a 17 percent annual rate in the fourth quarter, further widespread declines in factory output in January and February put us on track for an even steeper drop in the current quarter. Moreover, national and regional purchasing managers' indexes suggest that declines will continue in the coming months. Plummeting output left the capacity utilization rate in the manufacturing sector at about 67 percent in February, its lowest level since we began publishing that series in 1948.

As you know, the motor vehicle sector has been especially hard-hit. In response to the steady weakening of demand over the past year, automakers have slashed production. Assemblies of light vehicles fell to a 3.7 million unit pace in January, the lowest level since the 1950s, and that includes months in which there have been UAW strikes. Production increased to a still meager 4½ million unit pace in February, and we expect a further increase to about 5½ million units in March. But for the current quarter as a whole, the average level of production is low enough to lop 2 percentage points off the change in real GDP.

We have motor vehicle sales bottoming out in the next couple of months at levels just a bit below those seen in February. If that occurs, some further modest increase in production seems likely, as inventories will have been brought into substantially better alignment with sales. That said, production in the second quarter is only expected to move up to what we previously would have considered a deep recession level of 5¾ million units.

In addition to significant downside surprises in the labor market and in industrial production, the incoming spending data have been much weaker than we had expected seven weeks ago. Starting with some ancient history, we lowered our estimate of fourth-quarter real GDP by 2 percentage points to show a decline of 6¾ percent at an annual rate, with much weaker final sales more than accounting for the downward revision. Moreover, the incoming data early this year have led us to revise down our estimate of output for the first quarter as well. Indeed, the ink had barely dried on the Greenbook when we received weaker-than-expected trade data last Friday. Taking on board those data, we would probably mark down a bit further our projected decline in real GDP closer to minus 7 percent, about 1¼ percentage points below our January forecast.

Aside from net exports, some of the biggest negative surprises have been in capital spending, which is contracting more sharply than we had expected. Business fixed investment fell at an annual rate of 22 percent in the fourth quarter and is projected to drop at a 25 percent pace this quarter. Large cutbacks are being made in outlays for both equipment and structures. The pullback in capital spending has been greater than can be explained by business sales and interest rates alone, suggesting that financing constraints and heightened economic uncertainty are part of the story.

Spending by state and local governments has fallen noticeably as well; we had been expecting these governments to hold outlays roughly steady while waiting for greater clarity on potential relief from the federal government. Instead, mounting budget pressures led these entities to cut employment and spending late last year and early this year. We still think fiscal stimulus will provide a boost to state and local spending, but from a lower underlying base than we had expected in January.

The one notable positive innovation has come from retail sales, which posted increases in both January and February. Given the stronger recent numbers and the imminent support from fiscal stimulus, we now expect some stabilization in consumer spending in the near term, rather than the declines we had projected in the last forecast. Still, with mounting job losses, deteriorating household balance sheets, and sour sentiment, we don't think a sustained upturn in consumer spending will occur until late this year.

All told, the large downward revisions we have made to employment, production, and sales in the near term have important implications for the dynamics of the forecast going forward. The weaker labor market implies lower incomes and lower consumer outlays. And with the stock market down from our previous projection, those multiplier consequences for spending are amplified by more negative wealth effects. The accompanying weaker spending and business sales, in turn, feed back into lower capital outlays through the accelerator effect.

Another key element in the downward revision that we made to our forecast was housing. It has seemed, no matter how low we set the forecast, the data surprise us to the downside. Sales, starts, and permits all fell more than we expected in January, and we revised down the projected trajectory of housing starts significantly over the forecast period. As for the timing of when we expect to reach the bottom in starts, with a dogged persistence that is beginning to resemble that of Chicago Cubs fans, our motto remains, "Wait until next quarter." Yesterday's data on housing starts for February provide a glimmer of hope. Both starts and permits moved up, rather than declining as we had expected. But just as a few wins in spring training don't portend a World Series, it would be premature to read the starts figures for February as suggesting that we have reached a bottom in this sector.

The deeper declines that have occurred in final sales have left firms facing a larger inventory problem than we had earlier thought. In addition to the overhangs of unsold houses and motor vehicles that have been with us for some time, inventory-sales ratios now appear elevated in a wide range of industries. As a consequence, the production adjustment in our current forecast is larger and more protracted than the one incorporated in the January Greenbook.

While our projected recession is deeper and longer than in our previous forecast, we do see a variety of forces capable of braking the decline in activity and promoting an eventual recovery. For one, the most negative multiplier-accelerator effects associated with last year's shock are expected to fade out over the course of this year. Moreover, fiscal stimulus should provide a sizable boost to demand and production in coming months.

And, we expect financial conditions to gradually improve over the balance of this year and in 2010, with the stock market turning up, bond spreads narrowing, and credit restrictions easing. This broad improvement in financial conditions is an important element in our projected recovery. On this point, we take some limited comfort from the lack of further deterioration in recent months in some of our summary measures of financial stress—indicators that we have used to help gauge the unusual restraint on spending created by the disruptions in financial markets. All told, an anemic recovery gets under way in 2010 and then gathers further momentum in 2011 and beyond.

One notable feature of our forecast is that we have a downturn that in magnitude equals or exceeds those of 1970s and 1980s, but is followed by a recovery that looks like the gradual ones of the early 1990s and early 2000s. We think this makes sense for several reasons.

First, the deterioration in household wealth has been enormous, and even with our projected increase in the stock market, the wealth-to-income ratio remains much lower than it has been for the past 20 years. The adjustment of household spending to that reduction in wealth seems likely to occur slowly, holding down spending for some time. Second, and perhaps more speculatively, we don't think sizable pent-up demand is developing in either the household or business sector. Admittedly, it is awfully difficult to estimate target capital stocks for either sector, but our rough estimates suggest that we should not expect a big boost from efforts to rebuild depressed capital stocks. Third, conventional monetary policy actions have been exhausted, and we did not assume any additional nonconventional actions in this forecast. Nor have we assumed any additional fiscal stimulus. And finally, as we noted in the January chart show, we read the evidence as suggesting that recoveries from financial crises tend to be more sluggish than those from other recessions.

Turning to inflation, the CPI for February was released this morning.[4] The headline CPI increased 0.4 percent, in line with our expectations. Although food prices edged down 0.1 percent, higher gasoline prices boosted the energy component by 3.3 percent. Core CPI increased 0.2 percent, which was 0.1 percentage point above our forecast. Our miss was, at least in part, attributable to a jump in motor vehicle prices—an event which I am prepared to claim, with uncharacteristic confidence, either didn't happen or will be reversed in the next few months.

Beyond the near term, we have marked down further our inflation projection, in response to the weaker outlook for economic activity, a stronger dollar, and lower oil prices. After increasing 2 percent in 2008, total PCE prices are now projected to increase ½ percent over the four quarters of this year and to increase ¾ percent next year, with the projection for both years about ¼ percentage point below our January forecast. We expect a smoother deceleration in core PCE prices, from 2 percent last year to 1 percent this year and ½ percent in 2010.

There are sizable risks to both sides of our inflation projection. On the one hand, many of our models are projecting a more pronounced deceleration of prices and a move into outright deflation by next year. Those models appear to be expecting an appreciable decline in inflation expectations in response to wide margins of slack in resource utilization and low rates of headline inflation. On the other hand, it is very difficult to discern any noticeable shift down in longer-term inflation expectations since last summer, even as headline inflation has come down in the wake of the

[4] A table distributed by Mr. Stockton is appended to this document (appendix 4).

collapse of energy prices and the unemployment rate has jumped up. We have taken the middle ground here and assumed that expectations will drift lower but by less than some of our models are projecting. Steve will complete our presentation.

MR. KAMIN. Following on Dave's litany of woes about the U.S. economy, I can offer little comfort from the international arena except to say that we're not alone in our troubles. Data we've received since your last meeting indicate that foreign GDP declined at a 7¼ percent annual rate in the fourth quarter, much faster than we estimated in January and the sharpest quarterly decline—by far—since the start of our series in 1970. Of course, while the phrase "misery loves company" rings true from a psychological standpoint, it doesn't work so well in economics. As I'll discuss later on in my remarks, U.S. exports plunged in the fourth quarter and were a significant drag on U.S. growth.

The fact that the rest of the world has joined the United States in recession is not all that surprising. With the United States accounting for about a quarter of global GDP, and with the world's major economies tightly linked through trade and finance, downturns in the U.S. economy historically have coincided with downturns in foreign growth. The big surprise has been which countries have been hit the hardest. The United States, the United Kingdom, and the euro area, which have been at the epicenter of the financial crisis, registered fourth-quarter declines in GDP of "merely" 6 to 7 percent. Conversely, in many economies whose banking and housing sectors were less affected by the initial turmoil, output dropped much more sharply: by 10 percent in Mexico, 12 percent in Japan, 13 percent in Brazil, and more than 20 percent in Korea, Taiwan, and Thailand.

What accounts for the seemingly outsized response of many economies to the financial crisis? Clearly, one factor at work here is that, as is typically the case in recessions, the demand for manufactures has fallen more sharply than demand for total goods and services—this has led to unusually sharp falloffs in exports by many Asian economies. A second factor has been the collapse in commodity prices, which has weighed heavily on economies in Latin America and the Middle East. Finally, since the intensification of the global crisis last fall, investors have been pulling out of many emerging market economies, disrupting the flow of credit to households and firms.

Indicators for the current quarter are pointing to another 7 percent drop in foreign GDP, with activity declining at a similar pace in both the advanced and emerging market economies. Industrial production, purchasing managers' surveys, and business and consumer sentiment have either continued to fall in the past few months or are holding at the extraordinarily depressed levels reached late last year. Our forecast has foreign output declining more gradually in the second quarter before bottoming out later this year and accelerating to nearly 3 percent by the end of 2010.

If our forecast materializes, the foreign economy will have endured four quarters of contraction, the same as in the 1981–1982 recession, but much longer than the slowdowns of 1974 and 2001. By the time the foreign economy touches bottom late this year, real GDP will have declined a record 4¼ percent, and we are projecting a weaker rebound thereafter than occurred following the prior downturns. Accordingly, although it seems premature to be predicting the recovery when economies are still in free fall, our outlook does not seem entirely fanciful. It does, however, depend importantly on a number of factors that remain up in the air, including a stabilization of financial conditions and the recovery of the U.S. economy.

Given the difficult outlook, strong support from the public sector will be critical. Foreign governments will be providing a substantial amount of monetary and fiscal stimulus over the next few quarters. However, given the pace at which private demand is contracting and our uncertainties over its prospects, we judge this stimulus to be just adequate to secure the tepid recovery we are projecting, but insufficient to insure against any future negative shocks.

Starting with monetary policy, Japan, Canada, and the United Kingdom already have cut policy rates to 50 basis points or below. And although the ECB’s target remains at a lofty 1½ percent, the market rate itself has been trading in the neighborhood of 85 basis points. Accordingly, any significant further monetary support will have to come from balance-sheet expansions. The Bank of England, Bank of Japan, and Swiss National Bank have moved forward on such measures in recent weeks, and we expect them to be followed by other major foreign central banks, but to what extent and with what ultimate effect on their economies remain open questions.

In the emerging market economies, notwithstanding the pace at which output is contracting, we expect only moderate further policy loosening. Central banks in Asia have already eased considerably, and a number of policy rates in the region are now at 2 percent or below. In Latin America, interest rates remain much further above the zero lower bound, but the falloff in capital inflows, associated sharp currency depreciations, and continued high inflation will likely restrain further rate cuts.

Given the uncertainties associated with monetary policy, the need for fiscal support is all the more pressing. By our estimates, recently announced fiscal plans should add about 1 percentage point to foreign growth, both in the advanced and emerging market economies, in 2009. This represents considerable stimulus, roughly similar to that projected for the United States this year. But as only the U.S. and Chinese plans provide significant additional stimulus in 2010, more effort will be required should the global recession prove more persistent than expected. Moreover, many countries with high public debt or deficits—such as Greece, Ireland, Hungary, and Turkey, to name just a few—are constrained from substantial fiscal support and may even have to cut their budgets.

If financial conditions ease enough to allow freer access to international capital markets, a number of governments may loosen monetary and fiscal policies further. However, rather than stabilizing, there is a distinct risk that financial conditions could take a turn for the worse. We are particularly concerned that the fragile situation in Eastern Europe could deteriorate into a full-fledged banking and balance-of-payments crisis, jeopardizing the condition of many western European banks and potentially triggering a global emerging markets meltdown. Such a crisis would not only deepen contractionary pressures in the world economy, but would prompt many governments to tighten their monetary and fiscal stance, just when accommodative policies were most needed.

Even without an emerging markets meltdown, the global recession is having a profound effect on international trade and on the U.S. economy. In the fourth quarter, U.S. real exports plunged at an annual rate of 25 percent. This, by itself, would have subtracted more than 3½ percentage points from U.S. GDP growth. Because U.S. imports plunged as well, net exports subtracted a little under a half percentage point from GDP growth, but this is still a far cry from the nearly 2 percentage point positive contribution registered in the first half of 2008. Going forward, we expect both imports and exports to drop off further this quarter and next as the recession here and abroad continues, with the contribution of net exports hovering around zero. In the remainder of the forecast period, however, imports start picking up along with the U.S. economy, while exports remain moribund. Although we see the economies of our trading partners recovering a bit faster than the U.S. economy, another outcome of the global financial crisis—the nearly 20 percent rise in the dollar since last summer—helps support imports and restrain exports. As a result, we predict net exports will subtract a half percentage point from U.S. GDP growth during the remainder of the forecast period, adding yet another headwind to a long and growing list.

CHAIRMAN BERNANKE. Thank you. Questions for our colleagues? President Lacker.

MR. LACKER. Mr. Stockton, what did you say about auto prices? I didn't quite catch what made you believe they were going to reverse.

MR. STOCKTON. New vehicles prices were up nearly a percentage point, 0.8 percent, for February. I guess it was just more a hunch, given the incredible weakness in demand currently, and the fact that there still is a very high days' supply. It seems unlikely to me that we are on the verge of a turnaround in motor vehicle prices. So we had actually been expecting a decline. We got an increase. I am skeptical.

MR. LACKER. Thanks.

CHAIRMAN BERNANKE. President Stern.

MR. STERN. Yes. Dave, the Administration has asserted that the fiscal policy package will preserve and/or increase jobs by 3 to 4 million in the next couple of years. I was trying to figure out from your fiscal policy analysis what the comparable number was. I couldn't quite get there, although my rough calculation was maybe 2 or 2½ million.

MR. STOCKTON. It centers on about 2 million, somewhere between 1¾ to 2¼ million jobs implicit in our package over the course of the next two years.

MR. STERN. Okay. Thanks.

CHAIRMAN BERNANKE. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. On the international side, you talked about and our focus seems to be on Eastern Europe and the European banks. But I'm hearing a lot of concern about Mexico, both political meltdown—really serious civil disorder problems—and, obviously, some economic implications. Do you have any comments on the Mexican economy?

MR. KAMIN. From an overall economic standpoint, the situation in Mexico is quite serious. First of all, for the past three or four years, Mexican growth has probably been less than we might have expected, given its proximity to the United States and our markets and given how much potential there was for the economy to grow if the right structural reforms were implemented. In fact, a lot of those reforms have not been implemented. Mexican growth has been sort of moribund. It has depended on the United States as a source of both external demand and jobs for its people. Now that the U.S. economy is going down, the Mexican economy is suffering pretty badly, as evidenced by the 10 percent annual rate of decline in GDP in the fourth quarter.

Let me just add that obviously it is facing very serious political problems as well. There have been a lot of reports in the paper about drug problems and the violence associated with that. So, clearly, on a wide range of issues, Mexico has got problems.

Balance of payments and banking sector issues were of course front and center in Mexico's crisis of '94 and '95, and we would be hesitant to discount that possibility entirely now, but, interestingly, the banking system in Mexico seems to pose less risk than it might—certainly less than the banking system in Eastern Europe and probably less than those in other emerging market economies. First of all, a large share of its banks are foreign-owned, and that represents some source of stability. On top of that, the banks that are operating there appear to be less dependent on short-term wholesale sources of financing. So their situation is a little better. Obviously, the situation could take a turn for the worse in the coming year if the decline in output is sufficiently large that nonperforming loans go up a lot. But for right now, as I say, while Mexico has got a lot of problems on the balance of payments and on the banking fronts, the issues don't seem as pronounced.

CHAIRMAN BERNANKE. Others? No other questions? [No response.] Okay. Then, we're ready to begin our economic go-round. I'm going to start with President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. The Eighth District economy is in recession. It's possibly somewhat less severe than in some parts of the country, but still a very sharp recession. All of the problems that we see nationally are certainly apparent in the Eighth District, including credit market problems, deeply depressed auto sales, declining house prices, and so on. The national economy appears to have weakened further relative to January expectations. I think there's further downside risk, and I agree with many here that the main risk is some kind of failure to get the financial sector on track toward recovery. The global aspect of the downturn continues unabated. I think this is a very worrisome factor. It's largely outside our historical experience in the modern era. It may be that we're not fully comprehending the meaning of global events because they haven't really been part of our experience. And I'm worried about that.

I think expectations remain very fluid, both for the course of the real economy and for inflation. We know that expectations have a huge influence on macroeconomic outcomes. That influence is partially masked in normal times: In normal times, expectations are very stable; in normal times, for output, the private sector would expect something close to the balanced growth path; in normal times, for inflation, the private sector would expect something close to the implicit inflation target pursued by the central bank. So, in normal times, it appears that expectations don't move that much, and, perhaps, therefore, are not so important to how the economy is going to function.

But these are not normal times. As a result, expectations are very fluid and can be significantly influenced by just a few events. It's as if the private sector is throwing out all of the old data, because the old data come from a different regime that doesn't apply anymore, and they're looking at the most recent developments, just a few things that are happening, and deciding which direction the economy is likely to go and which direction inflation is likely to go. This is what makes me especially worried about the economy and the inflation path during 2009. In particular, I think further disinflation and possible deflation is a clear near-term risk. Deflationary expectations could become entrenched during 2009, especially given the downside risks to the forecast, including the global nature of the very sharp downturn and the possibility that the financial sector problems won't be addressed in an appropriate way or quickly enough. Deflation would exacerbate problems in the housing sector and credit markets generally because of the prevalence of nominal contracting in the economy. So I think a near-term goal for monetary policy is to avoid this outcome. In the medium term, we actually face inflation risk, because the expansion of the balance sheet would suggest lots of inflation possibilities out there. I call this a two-headed dragon. But if we get stuck in a deflationary trap, you're never going to see that materialize. And, again, a deflationary trap is, to my thinking, a steady state: You get stuck there, and you cannot get out.

Is a deflationary trap a real possibility? We have the clear example of Japan. We have foreign central banks sending their policy rates to zero globally. Our own model and our own baseline forecast have core PCE inflation at 1 percent in 2009, and below 1 percent for 2010, 2011, 2012, and 2013. With an economy in that kind of state for that long, suppose you get another negative shock at some point; then, you do go down to the deflation trap equilibrium and get stuck there. So I really think it's a problem for the near term—that we could get stuck in that trap.

Policy should attempt to avoid letting deflationary expectations take hold. How should we do this? I really liked the Bank of England's announcement during the intermeeting period. They said that they were planning to expand the balance sheet to increase the monetary base. They said that they expected that to feed through to the broader money stock measures and that the growth in the money stock would help them to maintain their medium-term inflation target. I thought that was a crystal-clear piece of communication, and the markets understand exactly what it means and what the intent of policy is. So I thought that that was a good example to follow. Those are my comments on the economy. Thank you.

CHAIRMAN BERNANKE. Thank you. President Fisher.

MR. FISHER. I was first going to say to Dave Stockton that our wives have an affinity for T-shirts. My wife, a smart Wellesley woman who spent most of her time at MIT, arrived at Oxford noting that the ratio of women to men was 1 to 11. She had a T-shirt for other women which she sold briskly, and it said, "Come to Oxford where the odds are good, but the goods are odd." [Laughter]

Mr. Chairman, I want to report on the microeconomic input I received from my corporate contacts, which numbered some 29 CEOs around the country whom I talked to before this meeting. Unfortunately, it confirms what Dave and Steve presented. In fact, one actually called me and said, "Do you want some good news?" And I said, "Please." He said, "Call somebody else." [Laughter]

As to our District, we have fallen finally into recession. We created jobs last year. I believe we are the only District that did create jobs last year, or had jobs created in the District. The cut is less severe—it will take fewer stitches to mend—but, nonetheless, we have been cut.

As to the national economy, my favorite indicators are all negative. There are 175,000 railcars that are out of commission. There has been some improvement in bulk shipping rates, but that is a head fake according to shippers I have talked to, because of the extraordinary purchase of iron ore that China undertook recently—in fact, record amounts. If you look at containers and other shipping indicators, these are all flat to negative. Of the world's large aircraft fleet, 20 percent—that's 2,800 airplanes—are now sitting unused in the desert. If you look at Boeing's numbers, it received only four orders for new aircraft versus several hundred last February. And I'm told by my contacts in the airline industry that the Chinese government has ordered all of their carriers not to take the liberty of buying a single plane in 2009. That from one of the largest net new buyers of aircraft in the world.

There is very little cap-ex taking place. In fact, every corporate contact I spoke to, from the large manufacturers to even Disney, is cutting back on cap-ex and displaying all kinds of microeconomic behavioral patterns that indicate the kind of deflationary trap that my colleague just spoke about. We've talked about them before, but the essence is they are withholding decisions. They're withholding decisions because they hope to get it done cheaper later. They're also withholding decisions because they are confused. And you see this in some of the data from those that touch many consumers in the country, as well. For example, according to AT&T, its large enterprise business has just stopped; its small business demand is in decline; its 800 services are down. And, very interestingly, overall minutes are declining significantly. One of the indications of movement of people is roaming minutes. Roaming minutes domestically and internationally, according to the CEO of AT&T, have come to a screeching halt.

The picture is similar if you talk to people in the travel and entertainment business, which I do like to look at. If you aggregate it properly, not just airline travel, not just hotels, but sports and entertainment and all that derives from it, it's a significantly sized industry. According to Disney's CEO, travel and entertainment is down 46 percent year-over-year in February. That's confirmed by the number of credit card transactions, which are up, but the total amount is down. According to the CEO of JCPenney, whom I'm fortunate to have on my board, this is going to manifest itself in further contraction, with particular risk in the commercial real estate area. The chairman of the retail federation estimates that, of 1,100 major malls in the United States, a third will fail over the course of the next three years. This is not happy news. Part of it has to do with the lack of debtor-in-possession financing. Without DIP financing, you accelerate the process. And I don't know how we are ever going to deal with that situation.

I couldn't find any silver linings. There is, I suppose, a pewter lining, as I like to call it. And, Governor Tarullo, without any insult to your industry, one of the virtues is that the legal industry is also contracting [laughter]; 6,000 people were laid off from major law firms year to date. There's a website that actually tracks this. What's interesting about it is that the transaction business has dried up and is not being compensated for by the bankruptcy business. I think the reason the bankruptcy business is not proceeding is because debtor-in-possession financing is very hard to come by and remains a problem.

There's also another pewter lining in the Wal-Mart reports: Gas price declines have added $120 to $130 per customer per month. The CEO, however, noted some inflation in apparel prices thus far this year, but they believe that is also a head fake, because they can tell from their own inventory that eventually those prices will have to come down.

So overall, Mr. Chairman, the situation is bleak. The key underlying weak factor that I hear about from CEO after CEO, from microeconomic operator after microeconomic operator, big or small, is a lack of confidence. When I first walked onto the training floors of Brown Brothers 37 years ago, Robert Roosa gave me a quote that I haven't forgotten, which came from James Madison: "The circulation of confidence is better than the circulation of money." There is no confidence.

I want to come back to a statement I made yesterday, and I'll withhold my comments on policy until the next round. In order to instill confidence, first, it takes time and, second, you have to exhibit competence. And in order to exhibit competence, I think you have to keep things simple. I came away from yesterday's session deeply concerned about our conversation about the TALF and the complexity with which we're engaging in policy. And I hope we can figure out a way to do what we do in the simplest, most communicative manner possible. I'm worried that we are turning to the shadow banking system to solve problems that they put us into in the first place. I'll just conclude with an analogy as a teaser for what I expect to say in the next round, and that's the following. We have to be very, very careful that we don't give a steam shovel and a case of Red Bull to the people who dug us into the hole we are in and who have undermined confidence and have put us in a predicament that's extremely difficult to get out of. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. Let me start by congratulating you on having a highway interchange named after you. I'm sure we all envy you having your own off-ramp. [Laughter]

Conditions in the Sixth District remain very weak, and our contacts expect worsening conditions in the near term. Businesses have made significant workforce reductions and tell us they are prepared to make additional cuts if economic conditions worsen. The end of the first quarter was seen by some as being a key milestone. If business conditions have not improved by then, they will move further to put their businesses in survival mode, so more layoffs could be forthcoming in April. All sectors of commercial real estate are under pressure from growing vacancy rates and upward adjustment of cap rates. I'm concerned that growing problems in commercial real estate are likely to further complicate efforts to stabilize the banking system and credit markets.

There's anecdotal evidence of alarm being expressed about and by the local government sector. Some jurisdictions and authorities are pinched not only by falling revenues but also by borrowing conditions in the municipal finance market. One large city mayor estimated several thousand private sector job losses from projects not helped by the stimulus package that will shut down in the near term due to financing difficulties.

Our directors and their contacts, as well as financial market contacts, are becoming increasingly vocal over the lack of specificity regarding economic policy and their inability to understand what we would call our decision rules. A major source of confusion is uncertainty about what policy actions will come next and under what circumstances expansions of current policy will be decided.

Turning to the national economic conditions in the outlook, the numbers indicate we remain in serious recession, with most data coming in worse than Atlanta's already downbeat expectations. If we were to submit a formal forecast for this meeting, we would adjust our trajectory for the economy downward and push the timing of the beginning of a recovery further out.

As mentioned earlier by Dave Stockton, one positive in the recent data is retail sales numbers. However, the CFO of the country's second largest retailer advised a cautious interpretation of sales numbers. Consumer purchases are occurring in an environment of deep price discounts and may not be a very solid indicator of improving economic health. Also, retailers are consolidating their inventories as they prepare for store closures.

We believe the risks remain to the downside for both economic growth and inflation. In my conversations this time with a few financial market participants and bankers, there was acknowledgement of improved conditions in a number of markets, particularly where the Fed continues to intervene. Also, progress of investment-grade corporate funding markets was noted. At the same time, there was sentiment that the Fed's credit programs may have to stay in place for quite some time, well into 2010.

On the subject of the housing and home mortgage market, I heard the view that the magic rate threshold for qualifying mortgage applications volume is 5 percent. When rates drop below 5 percent, refinancing volume especially has picked up markedly.

To repeat what I said yesterday, most of the sharpest comments dealt with the perceived policy ambiguity and the effect of this on markets. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Rosengren.

MR. ROSENGREN. Thank you, Mr. Chairman. We are more than a year into this recession, and yet the decline in GDP and deterioration in labor markets continue unabated and, indeed, continue to surprise on the downside. While I'm hopeful that our actions and the fiscal stimulus package will help to stabilize the economy in the second half of the year, the downside risks to our forecast remain my primary concern. Like the Greenbook, the Boston Fed forecast expects that the unemployment rate will remain well above full employment, and inflation will remain well below my target throughout the forecast horizon. Indeed, the Boston Fed forecast implies a high probability of a deflationary period if aggressive action is not taken.

Concerns with credit availability continue to be a dominant theme when I talk to businesses of all sizes. Lenders are looking for opportunities to tighten terms of lending agreements, and rollover of financing agreements remains problematic. In anticipation of continuing financing difficulties, firms report that they are restricting operations. Even organizations that normally would build through a downturn, such as hospitals and major universities, have halted projects, leaving holes and half-finished buildings at many construction sites in Boston.

I see several worrisome near-term concerns that are likely to impede more-normal financial market functioning. First, once we have reworked the initial submissions of the stress tests, the results for several major banks are unlikely to be consistent with public pronouncements by some major banks that additional capital is not necessary. As our baseline forecast is quickly converging to the stress scenario used in the exercise, there is a real risk of loss of public credibility as it becomes apparent that some large banks will need substantially more capital, which in the current environment can only be supplied by the government. I am concerned that stock prices and credit markets may suffer additional setbacks and make some of our forecasts for the stock market going forward a little more problematic.

Second, the delays in removing problem assets will continue to cast a shadow on many asset prices. We may need to move to simpler, more straightforward solutions for removal of problem assets, possibly in conjunction with the additional equity infusions at the end of the stress tests.

Third, like President Lockhart, I'm very worried about the commercial real estate sector, which is rapidly deteriorating. Neither the CMBS market nor banks are likely to provide much support for the rollover of commercial real estate financing. And I'm increasingly concerned about life insurance companies, which have traditionally been significant investors in commercial real estate, as share prices of the major publicly held life insurers are now for the most part selling at less than one-fifth of what they were six months ago, likely resulting in a limited financial capacity to provide commercial real estate financing. In addition, the decline in commercial real estate prices is putting many commercial properties under water, adding to financing constraints. While we normally do not consider life insurers to be a source of systemic concerns that would have significant impacts on markets, that assumption may be tested over the course of this year.

Finally, stabilizing the housing sector is critically important. While a small component of GDP, the impact of housing problems has been disproportionate to its weight in GDP. Declines in housing prices continue to limit borrowing capacity for households, cause large losses in household wealth that slow future consumption, and contribute to the significant losses embedded in mortgage instruments and related derivative products for a variety of financial intermediaries. While recently announced federal programs should help, those programs may not fully reflect the new reality that job losses are likely to be the primary reason that borrowers cannot make payments. We held a mortgage foreclosure event in Hartford, Connecticut last month, attended by roughly 900 borrowers. Discussions with the borrowers at the event, and subsequent survey results, indicate that job losses among one or more family members were already a key driver in pushing borrowers to foreclosure. Taking aggressive action to stabilize housing and employment may be particularly important at this juncture. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Hoenig.

MR. HOENIG. Mr. Chairman, I would say that the Tenth District is going to reflect very much what you have heard in the national briefing. It was doing better than the nation as a whole but is now quickly deteriorating into the national average. Our labor markets have continued to deteriorate. Unemployment rates are going up in each of our states. Our manufacturing activity has actually plummeted, importantly because of the weakening of the export market that was mentioned earlier. Our agricultural sector is still holding its own, but it, too, is showing signs of weakening, as is our energy industry. Commercial real estate is showing signs of weakening because of some of the refinancing that’s now required and because of the increasing vacancies that are affecting the cash flows off these and, therefore, affecting some of the parties holding these notes.

I would point out, too, that financing in the region has deteriorated, I'd say "badly" almost, and I'll give you one anecdote. I understand that it's not hard data, but it gives you a sense of the situation. We have an insurance company that does premium financing, about $1 billion financed out of a major New York bank. It went back to refinance a portion of the loan, and the bank wanted LIBOR plus 500. The CEO of this company said, "You know, I understand I have to help recapitalize that industry, but this is taking all my profit." So it is trying to get other types of financing. And that kind of pressure is, of course, trickling down and affects how they do business as well. So it is a pretty daunting task for businesses in this type of environment, I realize.

Finally, when we look across the District, we're seeing increasing numbers of problem banks, as well as banks that we would put on a watch list because of the concentrations in, say, real estate or some sectors of agriculture. So, overall, the District is reflecting the deteriorating conditions in the nation as a whole, and, that is, of course, a concern to us as well as to everyone else here.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Thank you, Mr. Chairman. The Third District economy remains very weak, and there are few signs that this weakness will lessen any time soon. The three-state region hit its employment peak in January 2008. Since then, it has lost 1.8 percent of its jobs, and 60 percent of that loss has come just in the last three months. You might step back and say, "Well, maybe this is the darkness before the dawn." I wish I had confidence in that, but I'm not sure that's what's going on. It looks pretty bleak.

Our Business Outlook Survey is set to be released at 10:00 tomorrow morning, so it's confidential until then. Last month's reading was near a record of minus 41. The reading that will be reported tomorrow morning is minus 35, so it's some improvement. We usually take about five points as being statistically significant, so this is just at that margin. A few months ago, the index went up and just fell back down again. So I don't know that there's a whole lot of comfort in the most recent number; I take it to mean things are about the same as they were. Survey participants do expect the outlook to improve in the next six months. But many of the forward-looking indicators suggest that before that comes about there will be further cutbacks in employment and further retrenchment in capital investment at our regional manufacturers.

Although banks in the Third District are in somewhat better shape than the national average—they tend to be doing pretty well—they do report consumer loan volume is down. And many of them also report that companies don't want to invest and don't want to borrow money at this point. So it's demand retrenchment rather than just supply retrenchment, from their perspective.

Bankers in general in our District are angry—they're mad, they're furious at the government. I'm getting requests to give TARP money back at an increasing pace. They're not being allowed to do it, or nobody at the Treasury is helping them do that. They are, as President Lockhart said, frustrated with the lack of clarity about where policy is going and what it's going to be. They're angry about the changes in the rules of the game, the ground shifting beneath their feet. And they're frustrated that some of the programs aren't doing what they're supposed to be doing. I have one major player in the student loan industry saying that the TALF is not going to do anything for student loans, which, by and large, are 7- to 10-year loans in view of the time it takes to get through college. So buying new issues of three-year loans won't help them, because they don't offer many student loans for three years. I can go down the list of many other industries who feel the same way. Whom are we going to bail out, whom are we going to protect, and whom are we going to support going forward? I think there's a lot of angst, a lot of uncertainty, and a lot of frustration out there in the business community and the financial community in particular.

So our District economy's outlook looks largely in line with that of the national economy. As President Bullard suggested, one of the things that has been most worrying in the recent episode is the dramatic decline in foreign countries and the impact that's having. That's something we can't do much about directly, but it is worrying, and, again, it's causing more angst and more fear and more problems.

Now, amidst this downpour of bad news and numbers, there is a possible ray of sunshine. I note—as Dave Stockton did—that the consumption numbers seem to suggest that the free fall in consumption may have come to an end. I hope that's the case; that would be encouraging. Both retail sales and disposable income numbers have held up in the last couple of months, and personal consumption expenditures have as well.

The last two months of consumer price inflation data suggest to me that the risk of a sustained deflation, at least in the near term, is somewhat abated. So I'm not as concerned as some are—President Bullard, for example—about the shift to sustained deflationary expectations. Although I think we have to worry about it, that's not my number one concern at this point.

Overall, my outlook for the national economy is pessimistic for the near term, although I continue to have a lot of belief that markets eventually will recover, so I may be a little more optimistic on a recovery than the Greenbook.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. The economic and financial news has been grim. Things are now so bad that I actually open the Greenbook with greater trepidation than my 401(k). [Laughter] The awful employment and spending data have not been much of a surprise, but they do dispel remaining hopes that we might see a turnaround any time soon. This conclusion is reinforced by what I'm hearing from my business contacts. Their already sour mood is taking another sharp turn for the worse. One director reported that businesses were so shaken that it would take a sustained period of positive data, on the order of six to nine months, before they would begin to consider expanding production and employment. Another disturbing sign of how tough things are getting is that people appear to be breaking into their piggybanks to make ends meet—the Cash Product Office reports huge increases in the amount of coins being brought into our inventory. [Laughter] The December inventories of quarters and dollar coins were up more than 50 percent from 2007, and even pennies were up nearly 25 percent.

Looking ahead, some more-optimistic forecasters have argued that we're likely to see a rapid V-shaped recovery similar to the ones that followed several past severe postwar recessions. The case for such an outcome is that housing construction and purchases of durable goods, especially cars, have been running way below trend for some time. Over time, these capital stocks will fall well below desired levels, and eventually investment must rise to bring stocks back in line with fundamentals. The resulting pent-up demand may lead to a surge in spending once the financial system regains its health and uncertainty is diminished.

But my fear is that we may not even get a modest U-shaped recovery, much less a V-shaped one. I have three reasons for this pessimism. First, the global nature of the recession means we can't rely on foreign demand to provide support for our economy. Instead, a sharp downturn abroad and recent dollar appreciation have driven down our exports and exacerbated our downturn. Indeed, given the high degree of synchronization among all of the major economies of the world, this is the first truly global recession since the Depression. Furthermore, as the downturn has spread to more countries, new cracks have developed in the already strained banking system. Steve discussed the situation in Eastern Europe, and we share his concerns. These countries have an estimated $1½ trillion of debt to Western European banks, and it's fortunate that U.S. banks have little exposure in this region. But loans from Austrian banks to Eastern Europe exceed 80 percent of Austria's GDP, and the exposure of banks in Sweden and Belgium exceeds 30 percent of GDP. Severe losses on these loans do pose significant threats to the banking systems in these countries.

My second concern is that, despite our best efforts at using both traditional and nontraditional monetary tools, the stance of credit market conditions has only improved modestly. In past recessions, the Fed has been able to fuel a turnaround rapidly by stepping on the accelerator through sharp rate cuts. But in the current crisis, it feels more like we are desperately trying to power a bicycle uphill rather than pressing an accelerator on a high-powered sports car. This conclusion is supported by work by my staff that aims to gauge the stance of credit market conditions. In particular, we use principal components analysis on a set of private sector interest rates to construct a metric of credit conditions that in normal times moves very closely with the real federal funds rate. According to this metric, we were basically treading water during much of the last year, with our policy actions roughly neutralizing the effects of the credit crisis on private rates. Since September and the introduction of more aggressive policy actions by the Fed, the FDIC, and the Treasury, this metric of credit market conditions has improved somewhat and is now at a level consistent with a modest degree of accommodation, but nowhere near as much accommodation as implied by the level of the real fed funds rate or called for by the stance of the economy. And, of course, this analysis abstracts from non-price terms of credit, and those continue to tighten as well. We see that in the Senior Loan Officer Opinion Survey. And one community banker on my board mentioned that he finds it now difficult to summon the emotional energy to make loans to anybody at all.

A third reason to doubt that we will enjoy a V-shaped recovery is the huge damage that has been done to balance sheets. Household wealth has plummeted: It fell more than $5 trillion in the fourth quarter alone. Unfortunately, households were not well positioned for such a shot to wealth. Instead, many had leveraged up to the hilt, and the combination of the dramatic loss in wealth and the massive household debt overhang portends years of subdued spending as households go through an extended period of deleveraging. I see worrisome parallels to the Japanese corporate sector during the 1990s. In that case, the attempt of firms to pay down debt produced a decade of weak investment. The downward pressure on household leverage will come both from lenders and from households. Lenders are likely to demand more collateral for loans going forward, and that collateral has been devastated by the collapse of housing and other wealth; and households are likely to recognize the benefits of stronger balance sheets for precautionary reasons and meeting longer-term goals, such as down-payment requirements and retirement. As one of my directors quipped, people may come to realize that they don't need three cars—they can get by with two and maybe even just one.

The outlook for inflation is worrisome as well. I think it's fair to say it is no longer a risk that inflation will persist for a time below the preferred rate—instead, it's our expectation. What's more, the probability of outright deflation is significant. In that regard, I'm closely monitoring wage developments, as I view the outbreak of sizable wage cuts to be a crucial step leading to sustained deflation. I have heard scattered reports of such cuts, but so far the majority of my directors say they're reluctant to cut wages for fear that it would undermine employee morale. Nonetheless, many of them cautioned that if the economy continues to deteriorate, they will have no choice but to cut wages and salaries. So, to summarize, I don't see forces at work that will propel our economy into sustained robust recovery any time soon. Even though the Greenbook forecast is hardly upbeat, I see substantial downside risk to that forecast, both for economic activity and inflation.

CHAIRMAN BERNANKE. Thank you. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. The reports from my contacts have been very weak for months now. In order to get a better sense of the outlook, I asked some of my contacts some questions focused on whether their responses thus far to the recession have been enough to prepare them for the weakness that they are anticipating in their markets. Unfortunately, the vast majority of them said that they had not done enough and that they continue to curtail their activities and investments at a very quick pace. And their confidence in a recovery later on this year is dwindling.

I am concerned that this lack of confidence is translating into actions that will further dampen our prospects in coming months. I was surprised that even some of the more successful manufacturers in my District, such as Eaton, Lincoln Electric, and Parker-Hannifin, are all implementing further cutbacks in investments, hiring, and production plans. In several cases, these further cutbacks have been motivated by this deepening retrenchment that we are seeing with our foreign partners. But some of my contacts are losing confidence in the policy responses to the recession. Several of my directors noted last week at our meeting that public confidence is obviously critical to our recovery plans, yet the public is increasingly finding the government's response confusing and incomplete. This lack of confidence is weighing on their expectations for growth this year and even next year. Now, my directors are certainly supportive of the actions that the Federal Reserve has taken, particularly the stress-testing that we are doing of banks and the long-term asset purchases. However, they are concerned that the communications about some of the other government programs—some of the Treasury plans—have been unclear, and, therefore, are hampering the recovery. Mr. Chairman, I think that your interview on *60 Minutes* played a helpful role in clarifying some of these programs, and I did receive many calls from directors and business contacts saying that they thought the interview was well received.

Like the staff, I revised down my projection for output and inflation based on the incoming data, and, obviously, the weakening global outlook. My projection is very much in line with the Greenbook baseline, although in my projection the unemployment rate peaks at 10 percent, because I don't anticipate as much of a cutback in the participation rate as the Greenbook does. Also, I do think that the outlook calls for a larger policy response. In my baseline, I've incorporated the simulations on additional nontraditional policies. I know the Greenbook hasn't, because they are obviously difficult to include in a numeric projection. But at this point, I have included some of that policy response in my outlook.

In my view, the risks remain very much weighted to the downside for both output and inflation. Given the repeated markdowns that we've made to our projections, I think more downside misses are likely to make it more difficult to restore confidence that we are dealing with the economic crisis appropriately. At this point, neither the projections nor any of the anecdotal reports that I have received are likely to make a difference in or shift our policy response. We are in the midst of an economic decline that doesn't have concrete signs of a developing recovery. I think we need to react to the current crisis thoroughly, but also with as much as clarity as possible. I know we've talked a lot about the focus on our communications of what we are doing. I do think that is critical at this point. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. I fully agree we are certainly in the midst of a significant contraction. Back in January when I submitted my forecast for the first half of the year, I had the economy declining at an annual rate of 4 percent, which is now quite close to the Greenbook number. The question I've been asking myself is: Should I mark the forecast down further and push the recovery off further? So far, I'm not fully convinced that that's the right response, in part because, as Dave Stockton noted, the basic case for recovery is the same as it has been—stimulative monetary and fiscal policy, gradual further improvement in financial market conditions, and the internal dynamics associated with the corrections that occur during a recession; that is, production and employment decline, an inventory correction process occurs, ultimately aggregate supply falls below even diminished aggregate demand, and then you have set the stage for the expansion.

Moreover, as a veteran of many, many forecasting exercises, I've seen some of this phenomenon before. There's a tendency in the midst of a serious recession, especially if you're doing bottom-up forecasting and going through the various components of aggregate demand—consumer spending on durables, nondurables, services—to take a look at each component and say to yourself, "Well, that can't get better any time soon." And by the time you've gone through that, you've eliminated all possibilities of any component getting better any time soon. So you wind up with a forecast with a very extended recession.

Finally, there's only one other point I'd make. It's not meant to provide a lot of comfort but just to suggest that it wouldn't take all that much for the recovery to get under way in the third quarter, albeit initially quite sluggishly. I just did an arithmetic exercise—that's all it is—and if consumer spending in the aggregate grew at 1½ to 2 percent rate in the third and fourth quarters, that would turn those negative GDP numbers in the Greenbook into slightly positive GDP numbers. The only reason I make that point is that it wouldn't take all that much. Consumer spending has shown some signs of leveling off, so it may be that there's some silver lining there. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. The clear deterioration in the real economic outlook since our last meeting is consistent with the information we had from the Fifth District. All our survey indexes remained at very low levels. The forward-looking components of most weakened as well. The Carolinas have been particularly hard-hit in recent months. Their economy is manufacturing-intensive and export-oriented, more so than the rest of the country, and their housing markets, which had lagged the national cycle, have weakened substantially in the last year.

I was pleasantly surprised by the retail sales numbers and the Greenbook's improved outlook for consumption expenditures, which suggest that diminishing marginal returns to cutbacks in discretionary spending may be setting in. I'm a little wary about making too much of it. I think the weak labor market is going to weaken further, and the possibility of further declines in wealth could easily drive household spending down another step.

I'd note though that in more normal times a significant deterioration in the forecast from one Greenbook to the next would bring with it a revision in the assumed policy path for the fed funds rate. Now that we're at zero, I'd expect a commensurate revision in the path for our balance sheet. If I'm reading the Greenbook correctly, the staff hasn't made any change to their baseline policy assumptions, and I would have thought the Greenbook would have built in more expansion of credit programs or the monetary base or both.

In this context, it's striking that, as I mentioned yesterday, the monetary base has declined by $200 billion since the beginning of the year. I'm looking at daily averages over the first two weeks of January versus the period ending, I think, March 11. I understand some big MBS transactions settled on March 12, so there's a tiny little spike in the figures. But, still, that was striking. The base obviously remains at a very high level, consistent with our statements, but I wonder if that $200 billion decline means that we tightened policy since the beginning of the year. I don't think we know one way or the other, but I'd think we would want to make sure we increase the base whenever the outlook deteriorates significantly. This is why I think it would be useful for us to begin outright purchases of Treasuries, and moreover, I'd like to suggest that we explicitly direct the Desk to make sure that the monetary base expands by a significant amount during the policy period—maybe even put the number into the directive for the intermeeting period. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chairman. The executive summary for my business reports this round is: Things have never been so bad. This view is essentially unchanged from January; they weren't happy then either. These reports seem to represent a continuation of the severe contraction rather than additional negative impulses. But that's not especially comforting, as this is shaping up to be the worst economic downturn since the 1930s. But President Stern's comments did make me feel better about the outlook, so I certainly hope I'm wrong there.

The Greenbook's presentation of an unconstrained optimal monetary policy response was striking in my opinion. The size of the policy gap is so large that quibbling over differences in model specifications and the like seems beside the point. I was contemplating asking Dave Stockton what it would take to generate inflation—maybe if potential output was less favorable than we think, that's how it would happen. But I couldn't imagine that the answer would change my opinion because they had one scenario that went some ways towards that already. I think this gap is representative of the tremendous amount of economic slack that we are facing. If adequate policy actions are not forthcoming or are not feasible, then larger and longer-lasting economic costs may be looming. Many of my contacts noted that if the economy did not find a bottom soon, they would be in for another round of major reductions in productive capacity. They specifically noted the likelihood of cuts in core labor forces and capital infrastructures. These adjustments would be very costly to undo when the economy eventually recovers.

The commentary I heard on financial market difficulties suggests that our credit policies are now fighting against even greater headwinds than before, but it's unclear how we might counteract this additional deterioration directly. In addition to continuing concerns about credit supply, more contacts are noting that the severe contraction is causing the credit quality of borrowers to deteriorate. Ford said that when they're making auto loans, the banks seemed to be getting the better-credit-quality buyers at the moment, but they said that their rejections on retail financing were 50 percent now, which is up 10 percentage points. Federal Reserve, Treasury, and FDIC programs have eased credit supply conditions somewhat and hopefully will lead to more improvement, but the reduced creditworthiness looms as a potentially even larger problem than restrictive credit supply.

In terms of the likely effectiveness of the TALF, I heard a number of different perspectives from my contacts. Discover Financial said the current TALF spreads were too wide to be attractive. Nonetheless, they thought the TALF would be a useful backstop. They also said they would consider using it, especially if investors became willing to accept somewhat smaller rates of return, that is, low double-digit returns. Investors in the middle of this transaction seem to be doing very well without really accepting a lot of risk—I'm not sure they're bringing a lot to the table, frankly. Ford was expecting to place several billion dollars of securities backed by consumer auto loans with TALF borrowers. They thought this would be quite helpful, but on the other hand, both Ford and GM indicated that they would like to use the TALF to finance dealer inventories. However, the high cost for credit enhancements to secure a triple-A rating would make it uneconomical for them to do so.

As a central bank, our credit policies are necessarily conservative. They are aimed primarily at improving credit supply conditions by lending on prudent terms. But what makes the terms prudent to us results in many issuers seeing the TALF as being too restrictive and on unattractive terms. I said to one CEO who was complaining of this that, if we were a private financial company with this pricing policy, we wouldn't last a week. Indeed, those firms with access to the TLGP were unanimous in preferring that source of funding to the TALF. Several of these also advocated expanding the borrowing capacity under the TLGP, and firms without access to the TLGP were lobbying to get in. Such are the benefits and distortions of our public programs. So my reading is that the prudent terms for the TALF make it less attractive and suggest its take-up rate and effectiveness may be limited. I'm not advocating changes necessarily—I'm just reporting that its macroeconomic effectiveness may be smaller than the economy needs.

Framing the monetary policy discussion with a viewpoint on the national economic outlook is fairly simple this time. Although I could cite some differences between my forecast and the Greenbook's projections, these differences do not change three material observations. First, enormous resource gaps through 2010 for sure will continue to require aggressive monetary accommodation with nonstandard tools. Second, for the foreseeable future, disinflationary forces seem strong enough that aggressive monetary policy accommodation would not impose undue risk to our price stability goal. Third, to offset these disinflationary forces, a sharp rise in inflation expectations would be necessary. I think it would have to be exogenous. It's not in my forecast. The circumstances by which this would occur are hard to predict, although commentators point to risks from the expansion of our balance sheet and future fiscal deficits. I do not expect these will have a quantitatively important impact on inflation expectations over the next couple of years.

Finally, the Greenbook's baseline is so dismal that, with the unemployment rate headed to 9½ percent and a substantial disinflation in train, even the most optimistic alternative scenarios do not see an increase in the fed funds rate before 2013. This is sobering. None of us are accustomed to thinking that a prolonged period of zero short-term interest rates will be associated with a lack of inflationary pressures. For virtually all of our contemporary monetary memories, inflation has been above desirable levels in the U.S. This is an enormous challenge to our thinking and to our typical approaches to monetary policy strategy. Indeed, the FRB/US calculations where inflation did overshoot were premised on the idea that these Taylor shocks would lead to an increase in inflationary expectations. That is, that they are very accommodative. But we don't see that in our analysis at the moment.

I began to think about the policymaker who equally weights his or her displeasure on either NAIRU or output and inflation gaps, which are the underpinnings for the optimal policy in the Bluebook. We're looking at an output gap in the Greenbook of 8 percentage points, so with equally weighted displeasure, you ought to be willing to accept inflation that is somewhat higher than your target. Given these large expected output gaps, even a borderline inflation nutter would be willing to accept a substantial risk of overshooting in the inflation target. So the bottom line, in my opinion, is that a well-designed program of substantial nontraditional monetary accommodation, in concert with clearly specified dual mandate goals and reasonable safeguards, will keep long-term inflation expectations anchored. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Vice Chairman.

VICE CHAIRMAN DUDLEY. Thank you, Mr. Chairman. In general, I think the Greenbook baseline forecast is pretty sensible. The New York Fed view is not much different, but, echoing President Stern's comments, I can also tell a credible story of why the rate of economic contraction first slows, then the economy reverses direction as we move into the second half of 2009: The inventory cycle turns from negative to positive, the decline in housing activity ends, mainly because there's no room to fall further, and fiscal stimulus provides support to consumer spending and cushions the downward adjustment in state and local government outlays. Unfortunately that doesn't tell us much about 2010 and beyond. In my view, the longer-term outlook rests on the answers to two key questions. First, what is the desired household saving rate? Where is it headed, and how rapidly will we get there? Or to put it somewhat differently, echoing President Yellen, where is the household sector in its deleveraging process? And, second, will the financial system stabilize and credit availability steadily improve over the next couple of quarters? Of course, these two interact. If we don't get an improvement in credit availability, asset prices will go down further, and that will feed back into the household saving rate.

The fourth-quarter flow of funds data were, I think, as expected. They're going to show this 9 percent drop in household net worth, which brings the ratio of household net worth to income back to levels not seen since the mid-1990s. That would seem to imply that the household saving rate, which is currently around 5 percent, will likely need to rise even further. And the question is: To what level? There has to be quite a bit of uncertainty about that both in terms of where we are going and how fast we are going to get there. One possible benchmark would be the household saving rate of the early 1990s, which was slightly below 8 percent. If that's where we're headed, I'd say that's probably doable while still having an economic recovery, although it is considerably higher than the Greenbook forecast of 5¼ percent this year and next. An 8 percent rate does not seem too high a bar, given that we have a lot of fiscal stimulus coming. The fact that most of the stimulus will be saved does not mean that the stimulus has been ineffective, since the counterfactual in this case might be that the households would have had to reduce their spending in order to achieve their new desired level of savings.

However, one could argue that there's a risk that an 8 percent household saving rate may be too low. Demographics may imply the need for a higher saving rate now, given that the working-age population is much older now than it was in the 1990s; in other words, if we adjust for the age mix of the population today, an 8 percent figure back then might map into a 9 percent or 10 percent figure today. If that's the case, obviously the task is a bit more daunting. But the bottom line is, we simply do not know how older households are going to react to the wealth losses that they've experienced in terms of how much they're going to raise their saving rate, whether they're going to delay their retirement, whether they'll have the opportunity to delay their retirement and keep their jobs, and whether they'll accept lower standards of living in retirement. It's just a huge open question.

Some commentators have set the bar much higher. They argue that the ratio of household debt to income needs to fall back to levels of the mid-1980s. That's a very high bar, implying the ratio would have to decline by more than half. It would suggest that the deleveraging process of households has only just begun and that we have many, many years of deleveraging ahead of us. I think that's a bit too pessimistic a view for several reasons. Over time, the cost of financial intermediation has fallen; that implies to me a higher debt-to-income ratio and a higher asset-to-income ratio, as well. Second, some of the changes in tax policy do encourage you to hold more assets and more liabilities; for example, earlier, you might have paid off your mortgage, and now you refinance your mortgage and instead fund your 401(k) plan. In that case your assets and liabilities are both higher now relative to your income, but you are not worse off. I expect we'll see some further decline in the household debt-to-income ratio, but because I think the longer-term secular trend has been upward, I don't think we're going to need to see decades-long household deleveraging. At least I hope not.

Of course, the difficulty in deleveraging will depend on the inflation outlook. I think that's important. If we do fall into a debt–deflation dynamic, then, as income drops, real debt burdens will increase, and it will become even more difficult for households to deleverage even if they want to. So that just underscores why we need to do everything we can to minimize the risk of a deflation outcome. The second key issue is, of course, the stability of the financial system. Without this, I don't think we can have a sustainable recovery. Yes, the economy could improve a little bit during the second half of 2009, but if we don't fix the financial system and its ability to intermediate between savers and borrowers, I suspect 2010 will be very disappointing.

This is why the downside risks to the forecast still are predominant in our views at the New York Fed. The FOMC and the Board should concentrate on taking whatever steps are needed to improve market functioning and the viability of the large banks, which lie at the core of the financial system. This implies expansion of our liquidity programs, such as the TALF, and, at minimum, increased purchases of agency mortgage-backed securities. It also implies support for the Treasury's CAP, which is designed to get additional capital into the banking system, as well as a willingness to extend our suite of 13(3) activities and our foreign exchange swap programs. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I agree with the general sentiments around the table. The economy is falling further and faster than we thought it would. We see some signs of stability, as President Plosser pointed out, in consumption and even in housing, but these are very tentative and at a very low level; I think even if household spending were to level out and get a little boost from fiscal policy in coming quarters, the economy would continue to fall further, at least for a little while. Business investment is very weak and will continue to decline in response to previous downshifts in sales through the multiplier-accelerator effects and in response to tight credit and very constrained credit availability. I was surprised in looking at the investment chart in Greenbook Part 2 to see that the cost of credit has actually risen substantially for businesses at a time when that's obviously counterproductive. Global demand shows no signs of stabilizing and will continue to depress exports, as Steve was telling us, especially in light of the stronger dollar, which just adds further downward pressure there.

To me, perhaps the most troubling developments have been in the financial sector. Maybe that's because I'm spending my days and nights worrying about them. There has been a tightening of financial conditions over the intermeeting period, even as the economy has weakened: The dollar has increased, equity markets have fallen, and interest rates, including the risk-free rate, have risen in recent weeks. I think there's a growing lack of confidence in financial institutions. This is not just a U.S. phenomenon, it's a global phenomenal; Trish's chart showed increases in CDS spreads everywhere—Europe, U.K., U.S., Asia—everywhere. I think the recession is spreading more and more into the loan books of these banks globally, and that's undermining confidence, despite government efforts everywhere to try to shore up confidence.

We used to talk about resilience in the economy—that was part of President Stern's discussion of why economies bounce back—but I think part of the natural equilibrating mechanisms involves expectations that things will get better, that is, people spend based on that expectation. As President Bullard pointed out, expectations about the future are very depressed, and I agree. Uncertainty is extremely high, and people don't know what to expect, so they're not taking risks, and that's impeding the bounce-back in the economy. Government's responses to the difficulties are certainly contributing to this uncertainty. Again, this is not a U.S. phenomenon. I think governments everywhere are having trouble finding their footing about what to do here. These are very difficult issues without obviously correct answers and responses, and, therefore, you see changes in approaches in various jurisdictions, not just in the U.S.

I think we've got a difficult witch's brew here. There's populist anger constraining policy options. We need the smartest people in the country in our troubled financial institutions and in our government working on solutions, and we're driving them away from both of those institutions every day. I think the set of circumstances implies that improvement in the financial sector is likely to be quite slow and halting, at a minimum. Lenders and investors are becoming more wary and less confident. We've got the risk of a further major deterioration in the financial sector, where the failure of several large institutions is a nontrivial risk and could be brought on by government policies.

I think the projection of stabilization of demand in the second half and recovery next year is reasonable as fiscal policy kicks in and assuming financial stability, but the downside economic and financial risks are very, very large. And even if the economy stabilizes in the second half of the year, we're starting at a much lower level, with a very high output gap. So I agree with others who have pointed to the risk of deflation and the interaction of that risk with the high levels of debt in the household sector as a very grave danger going forward. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Let me discuss four points: first, the economy in the near term with an emphasis on non-U.S.; second, medium-term implications of all these policy responses for the trend growth in productivity; third, financial markets; and fourth, briefly, financial institutions.

On the economy, the real economy is deteriorating globally, as everyone has said. I think the hard question is whether the pace of deterioration is slowing, and I suspect the answer is, "no, it's not." National capitals, including our own, do not seem to be capable in times like this, for many of the reasons Don has described, of slowing that deterioration. If anything, some actions seem to be giving rise to more uncertainty and greater weakness. Dave Stockton talked in detail about the data on spending and production, which continue to be poor, revealing the weakness in our economy and labor markets to be broad and deep. In the rest of the world, the deterioration, as has been discussed, is probably broader, probably deeper, and, more troubling still, probably even less likely to receive effective responses. The second-derivative question there is clear. If anything, the problems overseas are accelerating. The total collapse in global trade is well understood at this point.

The hard piece for me to get my arms around is: What are the second- and third-order effects of this weakness in global markets, in global economies, and what could lead in the near term to significant political, policy, and balance-of-power challenges around the world? Are we entering a period of instability that makes the rest of the world's economies even more vulnerable than they have been in recent years to exogenous shocks? And I don't think it takes an incredible imagination to think about what those could be. The unwinding of fiscal imbalances is happening fast, but the deterioration across our economies is happening even faster. The delta, I suspect, is a breakdown in confidence and the risk of policy failures which are exacerbating the situation. Perhaps it's true that the current account surplus countries are at greater risk than the deficit countries.

The G-20 meetings of this last weekend were, I would say, different in a couple respects from prior international meetings. For example, six months ago there continued to be a sort of schadenfreude about the U.S., some sense that people think the U.S. is getting what it deserves. That is nowhere in the room at this point. There is a worldwide need for U.S. leadership, a need for the U.S. economy to recover with great strength, and a rooting for the U.S. I think most of the other G-20 members were of the view that if the U.S. does not get this thing turned around, they are going to be in a very dire situation, even more dire than under current prospects. In addition, I thought that the most interesting topic was what was discussed only in the most hushed tones at these meetings, and that was Eastern Europe. It was still not allowed to be discussed broadly because I think the fears were so, so significant. Almost every other issue was put squarely on the table for a broad discussion, but the banking problems in Eastern Europe were hidden from public view, and that was more troubling than I had thought even before I went into the meeting.

Second, in terms of the medium-term economy here in the U.S., I thought that the adverse supply condition scenario in the Greenbook was quite indicative of more damaging risks. The misallocation of labor and capital across the economy merits some responsibility for this recession, and getting that allocation back to equilibrium is what recessions are all about. It's not obvious that is happening, at least at this point. Capital is not finding its way to anything close to its most efficient uses. Labor markets are not able to dynamically adjust. And these problems are likely to be particularly pervasive as the path to a new architecture for credit intermediation remains unclear. I think over time the real risk is that we are going to end up with less trend productivity, less growth, and a higher NAIRU. Policy actions seem unconducive to restoration of the growth rates that we have come to expect in recent years.

Third, let me talk about financial markets. I think financial market functioning is as poor as Governor Kohn described. Policy uncertainty has become the watchword, not just for the real economy, but for financial markets; and I suspect that when we look at CDS spreads for large financial institutions, notwithstanding the commitments that this institution and the Treasury have given, what markets have come to determine is that the Congress will be calling the shots, and that is a problem. I think markets are very uncertain, when there are 435 leaders in one body and 100 in another, about exactly what might come out of that, and the idea that there might be one party in control of government does not seem to be enough to drive leadership in a single direction. Thus, I'm not taking too much signal from the improvement in markets in recent days. Backlogs around financings are perhaps better than they were a week or two ago, and, in fact, a large pharmaceutical company last night priced a range of debt securities at impressive spreads. I'm really suspicious about whether a deal like that will be able to be done in the next couple of weeks, and so I think the backlogs are a big question.

Let me turn then finally to financial institutions as they relate to financial markets. I concur wholeheartedly with what President Rosengren said earlier. I worry very much that the policy response that's going to come from Washington in the next several days and weeks will not be well received, will require another pivot, and there might well be litigation around that. I think that is very, very damaging. I think we are entering a period in the next couple of weeks that could well determine the strength in the economy in the next couple of quarters, and I think, as Governor Kohn said, expectations in the real economy are confused because government actions in the name of boldness seem to be quite ambiguous. That is a very, very difficult combination. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. Governor Duke.

MS. DUKE. Thank you, Mr. Chairman. I'm going to talk again about the banks, and as a reminder, these are the traditional commercial banks, and it's a variety of them just below the top four across the country in varying conditions and of different sizes. Of that group, four are subject to the stress test, and in talking to them this time, I'd note that I've never, ever talked to bankers where the conversation was so much about government and so little about the banking business, particularly given what they're facing right now.

With the four banks that are subject to the stress test, I first asked them what the process was, and I got three different answers—so they didn't even quite understand what it was they were being asked to do. Two of them were convinced that it's a Trojan horse for nationalization. Several of them questioned whether this test is even going to have credibility in the marketplace once it gets done, thinking it's possible that those who are shown to be weak will simply have confirmed suspicions, but those who are shown to be strong will not get any boost in confidence from that. Also, there's a concern that they'll be at a standstill for the six months that have been given in order to raise private capital, because, even if they pass—even if they're not to get any government capital—if they go out to get private capital, then it looks like they are doing that only to avoid getting the public capital, so basically they cannot go to the capital market. Private capital is absolutely unwilling to come in until their status is assured and is not willing at this point to be a minority partner with the United States government. We've talked a lot about confidence, and one issue is that we have no confidence in our banks ourselves as a government, so it's very hard to engender public confidence in those banks.

Politics and bonuses, particularly with respect to the original TARP I capital: That capital now feels completely stigmatized. Banks thought it would be a sign of strength. The public perception is that they've been bailed out. The nondeductible dividend, the political strings attached, and the unknown future combine to make many of them, as President Plosser said, want to give it back. Given the events of this week, I think AIG first nearly took out the financial system and now may make it impossible for us to do any form of financial rescue. There was a letter from the Special Inspector General for TARP that went to all of the banks. It was a prosecutorial-sounding letter demanding to know exactly what they had done with every dollar that they had received from the government. They found that almost impossible to respond to, but all of them are working on it.

The executive compensation restrictions: The CEOs are not concerned about their own pay, and they're not concerned about that of their top lieutenants. What they are concerned about is their top revenue-producers who are being actively recruited by nonbanks and in some cases larger banks; these people might be in the top 25 in a small bank, but if they go to a larger bank, they would no longer be part of the top 25. At another bank, the chief of credit is retiring and the CEO does not think that he can find a replacement under the executive compensation restrictions. The rules are unclear. They're still waiting for the Treasury to publish the regulations, and they don't know, for example, what the effective date is. Some of them wonder whether they're going to have to take back the 2008 bonuses already paid. There are questions about vesting: If the vesting cannot occur until the TARP money is paid back, does that mean they cannot vest 100 percent, or does that mean they can only partially vest? If they vest 100 percent once the capital is paid out, what is that going to do to the income statements? Two of them were deferring their stockholders meeting until the proxy rules became clearer.

The removal of requirements for paying the TARP capital back, which was part of the last fiscal recovery plan: Investors already viewed this as temporary, and therefore they were treating it as a loan rather than capital—hence the focus on tangible common equity. Now it's clearly temporary, clearly a loan, and clearly not capital. One of the banks said that they were getting calls from numerous private equity firms, which they originally would never have talked to, saying, "Once you get through the stress test, if you want to give the TARP capital back, we will come in." Ordinarily they would not have taken it, but now they're looking at that as an option. The Chairman said in his interview on *60 Minutes* that a sign of the economy recovering would be a major institution getting private capital—you may get that wish. All but one expressed the absolute desire to repay, and that is what they're focused on. The one that was not going to repay is going to put itself in a position to repay and just simply not pay it back until, as he said, "the clouds part and the sun shines." So no banks are willing to leverage it further and get into a position of needing to keep it. So it's not doing any good. It is not performing any function except sitting there as a standby.

Capital stories: One bank was contacted by another—both were fairly good-sized banks and they talked for a good amount of time. It was a good strategic fit. There was no issue with price. There were no social issues. However, it required additional capital, and they turned it down. Another one had been in detailed talks with the FDIC about taking over a problem bank. The deal included taking additional TARP in order to make the deal work. They notified the FDIC that they were standing down; they no longer wanted to have anything to do with that. And finally, a bank that had not taken any of the government capital had sold trust preferred and common with just a few phone calls last year. This year, the only buyers are the nonpublic investors, because they're worried about mark to market and OTTI, and they will not invest if TARP capital is present. Now the trust preferred will be priced at 11 to 12 percent fixed with warrants; last year that price was LIBOR plus 375.

The bottom line is that the political and public perception right now precludes the use of government capital for healthy banks, and the presence of public capital has put private capital further out of reach. All of that being said, I still believe, when we look back on this episode, we will determine that the injection of capital into the banks kept us from a meltdown. But we'll also conclude that the public outcry forced the capital back out again. My most optimistic projection is that it will be replaced sooner than anticipated with internal and private sources and that banks will then learn to work with the capital that's available to them.

In terms of the FDIC, the restriction and higher fees for issuance of the TLGP are causing banks to speed up issuance. They originally thought they had a period of time, and the investment bankers were feeding these issues out in sort of a measured way. Now they all feel like they have to issue before April 1, before the price goes up. Banks did not see the FDIC increase in the premiums and the special assessment coming. Most of them, of course, believe that they're paying for the bailouts of large banks in some way, and it wipes out a significant portion, if not all, of quarterly earnings.

Now to the bankruptcy cram-down for prime, jumbo, and all types of securitizations: The bankruptcy cram-down will alter the order of payments, so that the losses are then shared equally by all tranches rather than in order. This is going to further reduce the value of triple-A tranches of those, and the staff estimates that's a market of about $600 billion in securities.

The Federal Home Loan Banks: The Seattle bank became the first to exhaust its retained earnings. They're primarily mark-to-market losses, and it's making the case that they're not real losses. But the question is: What does this mean for valuation of the stock that the banks hold? Stock ownership is a requirement for borrowing, so anybody who's borrowing from Federal Home Loan Banks also owns that stock. The advances are getting significantly more expensive. This is not an issue just for small banks—the top 10 banks have 20 percent of the advances from Federal Home Loan Banks. Bankers' banks and corporate credit unions, I think, pose similar risks for smaller institutions.

Fair value accounting is still the number one concern in the industry. I would look to see what happens with the impact of the revised standards on the first quarter. That could be very helpful, although banks that took big losses in the fourth quarter don't get to reverse them.

Let's switch just a minute now and talk about what's actually going on in the banking book. Deposits are growing, in some cases significantly. Transactions, as consumers change their behavior, are down significantly, as are overdrafts. In the loan area, demand is down sharply. Consumer and small business applications are up a bit, but the approval rates are down about 10 percent, as you said. In terms of home equity loans, the reasons for the denials are primarily issues with debt-to-income ratios and appraisals. One thing that consumer groups in here in last week reminded me of—which I had forgotten and shouldn't have—is that home equity is a primary funding source for small businesses, not SBA loans. We tend to look at home equity as a consumer loan, but it is really small business financing. In terms of business loans, they are down from lack of income and in many cases actually outright losses.

In the construction loan area, they are still working through the existing residential construction loans and dealing with lots and lots of lots. There's not much new commercial construction—it's primarily medical or educational facilities. And there is no takeout for completed construction. Some banks are pulling away from loan products, segments, industries, or geographic areas. Others are taking the best of the deals and underwriting them individually. For example, if somebody says, "I'm getting out of all deals to a given segment," a smaller bank will come in and underwrite them individually and take the best of those deals. Those are the ones that are growing their loans.

Student loans: They were already low margin due to a mismatch in reference rates. The banks are currently doing more volume than they want, and they seem delighted to hear that the federal budget is taking them out of the student loan business.

Mortgages: The application volume slowed when rates picked up, and it's still primarily refinancings.

Loan modifications: The GSE and service portfolios were modified, but they are concerned about the long-term effect of the very low rates with the ceiling for their own book.

Credit quality: Delinquencies continue to rise. They're starting to sell properties at the same rate they're bringing in new ones. The growth in loans that are ninety days past due are primarily loans that are in the process of modification. The commercial loans are the ones showing real trouble right now, and as I said yesterday, commercial real estate loans are really just business loans. The repayment and the collateral value of those loans depend on the business cash flows, and the appraisals right now are stunningly low. Many retail stores are closing. Others are on percentage rent, so that cash flows do drop with sales. Some centers are one tenant away from disaster. Hospitality is suffering from not only the recession but the stigma. In Hawaii they are having $10 million a week in cancellations.

The banks, though, are not foreclosing. In this case, they are modifying, offering reduced payments, and putting on nonaccrual as long as the operator will continue to operate, because they don't want those properties back. Some banks are actually incentivizing their loan officers to move loans out rather than to bring loans in. Some banks are offering to settle performing loans at a discount in order to get them off the books. One bank is considering making jumbo loans at conforming rates on its own books to diversify its borrower risk and reduce the inventory of construction loans. With the residential construction loans, you almost get an impression of a store that's getting ready to go out of business and hasn't been able to buy new inventory: The inventory they have is not the inventory that's selling, and it's just sitting there on the shelves.

In terms of auto loans, there are lower losses on cars that are coming off lease. The wholesale inventories are firming up, and I think that would show through to new cars by the third quarter. Rental agencies are trimming their fleets by about 20 percent. Dealers can't sell, so they are looking to manufacturers to repurchase the inventory. A Lexus dealer said he has customers who normally would buy on a regular basis and can afford to buy, but are worried about the appearance of buying in a situation where people are losing their jobs.

The boat inventory is aging. It's now three years old, and G.E. Capital is the only company financing boats.

Borrowers do not expect to have to pay. One CEO was at his neighbor's house, which she had just purchased for $1.6 million. The neighbor showed the improvements that she was making and then asked who the modification officer at the bank was because she wanted to modify the mortgage on her vacation home. Another CEO had a private banking client come in who had purchased a home with a private banking loan for $2 million in 2005. The loan was interest only for a million and a half. At one point, the client got a $3 million offer and turned it down. Now the property is for sale at $1 million, and the client said he would continue to make the payments if they reduced the loan to $750,000.

There's a huge increase in fraud. Floor plan and wire transfer were the two that were mentioned.

In summary, right now I'm really not hearing much about bank-specific issues that are impediments to lending. Deposits are high. Government liquidity is cheap and plentiful. The primary reasons for not lending are related to creditworthiness and concern about economic conditions and collateral values. Banks are reducing credit line availability, but it is due to concerns about credit and collateral. Loans are difficult for larger amounts, for credit-only customers, for those with high debt-to-income ratios or weak credit histories, for those who have little equity, and for any construction loan. Finally, there's sticker shock. I don't think the banks will ever go back to lending at the spreads typical before this episode, so many of those who think that they can't get credit are concerned more about the cost of credit, and I think those high loan spreads are here to stay.

CHAIRMAN BERNANKE. Thank you. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. Not surprisingly, my assessment of the economy and the financial sector converges with those that have already been expressed. So let me just quickly make a few additional observations that support the hypothesis of an even longer period for stabilization and recovery than reflected in the Greenbook forecast and, thus, even greater vulnerability for the economy for some time to come.

I begin with an admittedly speculative point about the domestic labor market, but one that complements some earlier comments by Presidents Yellen and Evans. It appears to me that an unusual number of industries will be undergoing major structural adjustments during the course of this downturn and, as a result, may not rehire at the rate that might be expected in a cyclical rebound. These industries are two groups. One consists of industries like construction and financial services that were directly involved in the asset bubbles associated with the financial crisis. It seems likely that overcapacity in those industries so far exceeded sustainable demand that the post-recession employment profile will be substantially, rather than just moderately, below pre-crisis levels. A second group consists of industries that, even in the middle part of the decade, had seen significant pressure on their business models. Companies and sectors as diverse as autos, media, legal services, and retail were already in the process of consolidation and/or downsizing. This process has clearly accelerated under the weight of the contraction in real GDP. There are good reasons—anecdotal, I admit, but good reasons, nonetheless—to believe that, to a greater or lesser degree, each of these industries will emerge from this recession permanently leaner than they were, and some may be fundamentally changed. This observation is, as I noted, to date unsupported by even raw data, much less by systematic comparison with earlier severe recessions. But if my intuition is buttressed by such an analysis, elevated unemployment levels may be stickier for a longer time than we now anticipate. The emergence of new firms and industries that might normally be expected to pick up some of the slack will, at the same time, be hindered by continuing dysfunction in financial markets.

I have some very different observations about the international economy, but, I'm afraid, with similar implications for the shape of the GDP growth curve. The downward revisions of economic performance abroad do not seem to have been met with a sense of policy urgency in many countries, particularly with respect to non-monetary policy measures in the advanced foreign economies. Indeed, my conclusion from my week in Europe was not dissimilar to that of Governor Warsh. I observed, in addition, that there has been a kind of collective decision among policymakers to put on a relatively happy face publicly, while being unable privately to offer any grounds for optimism. In formal comments and public utterances, a number of policymakers made reference to wholly adequate stimulus measures. They discounted the significance of increased bank CDS spreads, or, in at least one case, commented on the wonderful bargains available to those who still had jobs. This attitude is of particular concern because, as Steve Kamin mentioned, the effects of stimulus measures in many advanced foreign economies are substantially front-loaded into 2009.

Whether because of policy paralysis in the face of daunting challenges or, in some cases, because of the weak political circumstances of incumbent governments, too many countries seem unable or unwilling to elevate their responses to rapidly deteriorating conditions. I worry that a similar hesitancy to take forceful steps could lead to inadequate responses to contingencies, such as widespread banking problems in emerging markets. An absence of confidence in the political strength of the government can also push officials towards more serious consideration of measures, such as shifts in foreign exchange policies, which may relieve a certain amount of domestic pain by shifting it elsewhere in a neutral or even negative-sum fashion.

My concerns about this issue have increased dramatically in the last week. Many emerging markets have limited capacity to help themselves, given their own fiscal and monetary constraints. One major exception, of course, is China. Yet even China seems to be relying in the medium term on a rebound in advanced foreign economies that would restore many of the exports lost in recent months. While that approach worked well for countries coming out of the Asian financial crisis in 1999, it was built on the strength of largely unaffected American and European economies. Obviously, demand in our economies will be weak for quite some time. Moreover, the continued problems in our financial sectors imply that capital flows to emerging markets are unlikely to pick up, as they did following the Asian financial crisis.

Despite these impediments to a reasonably fast-paced return to conditions promoting rapid emerging market growth, there's little indication in China or elsewhere that policymakers have used the crisis to accelerate shifts in their own growth models away from a high level of export dependence. Coupled with what is, at least for the present, a somewhat passive policy instinct in some advanced economies, international developments may, like our domestic employment situation, suggest a more prolonged and shaky recovery period. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. I understand coffee is ready. Why don't we take a 20-minute break?

[Coffee break]

CHAIRMAN BERNANKE. Let me start by trying to summarize the discussion around the table, and then I'll give a few additional comments. The group agreed that the economic outlook has worsened significantly, and although it wasn't noted, we have seen very sharp declines in both the fourth and the first quarters. The slowdown is widespread across sectors and has included not only such areas as construction, manufacturing, and retail, but also hospitality, shipping, and to some extent energy, agriculture, and other areas. A notable development has been declines abroad, which have been exceptionally severe, and which, together with the stronger dollar, are hurting U.S. exports. There was a view on the part of some that there might be some stabilization later this year. Factors that might promote a weak recovery later this year or in 2010 include fiscal policy, monetary stimulus, improvements of financial markets, slower declines in housing, and working out of the inventory cycle. However, I have to say that there wasn't much conviction behind this view, and some saw at best an L-shaped recovery.

Risks clearly remain to the downside, and a protracted period of economic weakness remains a significant possibility, reflecting factors such as an ongoing lack of confidence in government policy, general uncertainty, need for economic restructuring, and the ongoing deleveraging process by both financial institutions and households. International prospects may not be much better, as other countries also face needs for restructuring and many are having inadequate policy responses. Consumption data improved slightly in January and February, but consumption fundamentals remain quite weak. Declines in wealth have been sharp and have led consumers to attempt to repair balance sheets by increasing their saving. The labor market is shedding jobs rapidly, and substantial job losses may continue for a while. Fiscal stimulus was mentioned. Housing starts and permits have increased a bit, and the Administration's foreclosure mitigation plan may also be of some help in the housing market. Nevertheless, housing continues to disappoint to the downside in general, and house prices continue to fall. It was noted that declines in house prices affect not only the rates of residential construction but also consumer wealth, as well as the quality of assets that are held by financial institutions.

In the financial sector, many credit markets, especially those in which the Fed has intervened, remained fairly stable in the intermeeting period, despite worsening economic news, and some highly rated corporations have issued debt. However, confidence in the banking system has deteriorated, as reflected, for example, in widening CDS spreads. Lending is down, reflecting in part credit supply constraints, as well as lower loan demand and bank concerns about credit quality and about the economy in general. Participants remain concerned about the effects of lack of financing on the commercial real estate sector in particular. The success of government actions to stabilize the banking system remains an important factor in the outlook. There's a great deal of public skepticism about government efforts in this regard, as well as populist reaction.

Industrial production has fallen sharply both here and abroad as global trade declines. Managers remain pessimistic and uncertain about prospects for sales, prices, and employment and are prepared to cut employment and investment further if improvement does not materialize. Demand for new capital goods remains weak, as capacity utilization has set a postwar low. Credit constraints are perceived to be an important problem.

Most participants expect inflation to remain very low for a time, and some are concerned about the risk for deflation, including falling wages. Deflationary trends could result in a deflation trap or a debt–deflation dynamic. Expectations of inflation, but also general economic conditions, will clearly play an important role going forward.

Those are some of the things I took away from the discussion—I'm sure I left out many points. Are there any comments? [No response]

Let me just add a bit to that. I don't have a great deal to say. As everyone noted, the intermeeting news was generally disappointing—below expectations. It's notable that in

December we thought things were bad enough to cut rates to zero, and in the last two meetings the changes in the outlook both times have been quite negative. In particular, like the rest of the world, the U.S. economy experienced very sharp declines in the fourth quarter and apparently now in the first quarter.

Perhaps the most striking development since the last meeting is the weakening of the global economy. It's really quite remarkable how quickly that happened. Many of you have experienced being abroad and hearing people say that on Tuesday things looked okay and on Thursday a sudden chill hit the atmosphere and there's been a tremendous decline since then. I think one interpretation of the worsening of our outlook is that, in fact, the shock that hit the world economy in September and October was a truly enormous shock and that we have been slow in understanding how big it was and how persistent it was. So, in some sense, it's not that we've had new shocks, but rather that we are just coming to the point of understanding how bad that shock was.

There were, of course, a few glimmers of positive news, and President Stern and others made note of that. There were some indications of stabilization in consumption in January and February, and that is before the actual fiscal stimulus kicks in, which may be of some help unless you think people are anticipating it, which is possible. That seemed to happen last spring actually. Also, we saw a bit of improvement in the housing starts and the permits yesterday. So there's a little good news there, but, like most people, I wouldn't want to take too much of a signal from that. First of all, both of these data sets are very volatile month to month, and they suffer from a great deal of seasonality and other factors. But more importantly, given the size of the shock that the world economy apparently was hit with in the fall, there's going to be an unavoidable cyclical dynamic that's just going to have to work its way out. There's almost nothing that can be done at this point to avoid it.

In particular, consumer spending may stabilize, but it's going to be facing very substantial headwinds, including the familiar list of further stock price declines, house price declines, ongoing job losses, confidence declines, and the same factors that we've talked about. I'd reiterate also the point that the Vice Chairman made about the saving rate. We have a recent reading of about 5 percent in the household saving rate. That was possibly, to some extent, exaggerated by temporary increases in income. If the consumer wants to maintain that saving rate or go higher, it suggests a relatively weak consumption profile going forward.

Moreover, even if consumption stabilizes, the rest of the dynamic is still very powerful. Inventories, for example—the inventory profile looks worse than it did at the last meeting, in the sense that the overhang seems to be greater than we thought it might have been and, therefore, the cycle will take longer to work its way through. I talked about this at the last meeting. At the last meeting we had inventory dynamics leading possibly to slightly positive economic growth by the third quarter. Those dynamics now look distinctly less favorable. Inventory investment is likely to be negative throughout the rest of the year. It may add to growth in the sense it will be less negative going forward, but, certainly, that dynamic is going to be a very powerful one for some time.

The other dynamics that have been talked about around the table include investment. We could hardly expect strong investment in the context of declining output, a postwar low in capacity utilization, credit constraints, uncertainty, et cetera. With investment continuing to be quite weak, final sales will be weak, and therefore, the inventory dynamic will be stretched out. There's also, of course, an employment dynamic to the extent that the employment levels are above the sustainable levels from the perspective of individual firms. As the continued economic weakness is perceived, we'll see further job losses and further dynamic adjustment.

I would reiterate the importance of the global decline. Steve talked about the implications for contributions to GDP of the swing in exports from early last year until now, and there obviously is not going to be major change in that in the near term.

And finally, there was a lot of discussion around the table, which I would reiterate, about financial conditions. There is some improvement, or at least some stabilization, in some credit markets. I think that we're certainly better off than we were at the beginning of the shock in September and October, but banks are under exceptional stress. The CDS spreads were mentioned. The political situation is very adverse in terms of ensuring that the government will have the resources and support to take the necessary action to get the banking system stabilized. Thinking about the alternative simulations in the Greenbook, I think delayed financial repair might well be one that we would want to consider. The experience of other countries and other episodes is that that leads, at best, to a period of stagnation, if not to further decline.

I don't want to be completely bleak. Like others, I saw a few positive signs. There's some indication that the free fall of the fourth quarter and first quarter might be moderating to some extent, particularly in consumer spending. If that's so and if fears of a depression or some extreme event begin to wane, we may see some stabilization of final demand, which then will feed into the inventory and investment dynamic over time. But under any circumstances, and particularly if the banking situation is not resolved in a favorable way, I think we can expect to see very large output gaps develop and a very sustained, weak condition for the economy.

That obviously has implications for inflation. As I mentioned last time, deflation per se is not necessarily the issue. The fact is that, as disinflation progresses, that itself will raise real interest rates and exacerbate to some extent the debt issues and the housing-valuation issues.

So putting that all together, as many people discussed yesterday, I do think that some aggressive policies may be called for today, and with that I'll stop and turn to Brian to introduce the policy round.

MR. MADIGAN.[5] As indicated by the Greenbook and by your discussion this morning, the economic outlook has deteriorated markedly over the intermeeting period. At the same time, the options for applying additional stimulus quickly appear limited. It now seems likely that the TALF will lift off only slowly. And prospects for the enactment of additional fiscal stimulus, at least in the near term, appear dim. In these circumstances, consideration of further monetary stimulus through large-scale asset purchases would seem to be warranted. The Bluebook presented two policy alternatives, A and B, that involved additional asset purchases and one, alternative C, that would not involve further stimulative measures. I will focus my remarks this morning on alternatives A and B. This morning, we have proposed revisions to the draft statements; the revised statements are provided in the package that was distributed to you earlier labeled "Material for FOMC Briefing on Monetary Policy Alternatives."

I will begin with alternative A, on page 2. Under this alternative, the rationale section—paragraphs 1 and 2—would note that the economy is undergoing a severe contraction and that the near-term economic outlook has worsened. It would point to a number of indicators of the economic weakness. Paragraph 1 would end on a note of some optimism by stating that the policy actions taken to stabilize financial markets and institutions, together with fiscal and monetary stimulus, will contribute to a gradual resumption of sustainable economic growth. Paragraph 2 would note the Committee's expectation that inflation will remain subdued, dropping the phrase "in coming quarters" that was used in the January statement, consistent with a view that inflation could be low for some time. Indeed, it would again cite "some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term." As President Fisher noted, the rationale section provides a rather downbeat reading on the economy, but perhaps one that is realistic.

In the policy paragraph, alternative A would again indicate the Committee's intention to employ all available tools. It says that the Committee will hold the federal funds rate range at 0 to ¼ percent and indicates an expectation that economic conditions are likely to warrant exceptionally low levels of the federal funds rate "for an extended period." This phrase would suggest a longer interval than the phrase "for

[5] Materials used by Mr. Madigan are appended to this document (appendix 5).

some time" used in January and suggested for alternative B. To provide additional economic stimulus, the Committee would take three policy actions under alternative A: increasing the amount of its agency MBS purchases by $500 billion to a total of $1 trillion this year; increasing the amount of its purchases of agency debt securities by $100 billion to a total of $200 billion this year (the boost to agency debt purchases is an addition relative to the alternative presented in the Bluebook); and initiating purchases of longer-term Treasury securities that are to total $300 billion over the next six months.

This paragraph would also note that the TALF has been launched. The statement would conclude by indicating that the Committee will be carefully monitoring the System's balance sheet and by suggesting some predilection toward stepping up its balance sheet expansion by noting that "it will be assessing whether a faster pace of asset purchases would be helpful in improving credit market conditions and supporting economic activity." A possible downside of including such language is that it suggests a possible course of action that the Committee may end up not pursuing.

Alternative B, on the next page, begins with a rationale section, paragraphs 1 and 2, that is identical to that proposed for alternative A. However, under alternative B, the Committee would not initiate purchases of Treasury securities. Rather, it would more than double its purchases of agency MBS securities, to a total of $1.25 trillion this year, and double its purchases of agency debt securities to $200 billion. This alternative would not include anything comparable with the final clause of alternative A indicating that the Committee was inclined to further step up its asset purchases.

In summary, alternative A would constitute a somewhat more aggressive expansion of the FOMC's asset purchases than alternative B. The differences in terms of total asset purchases are small: Alternative A would commit to an expansion of your asset purchases by a total of $900 billion, whereas the increase under alternative B would be just slightly less, at $850 billion. However, as I noted, the language of alternative A would be more forward-leaning with respect to possible future increases in asset purchases. And the initiation of Treasury purchases might suggest to market participants that the Committee's operations could be expanded particularly in that direction in the future.

The key difference between alternative A and alternative B really is whether or not to purchase Treasury securities. To review the arguments for and against such purchases, you might be inclined to proceed with purchases of longer-term Treasury securities if you: believe that the economic situation had deteriorated so substantially that you did want to apply "all available tools" as indicated in your previous statement; feel that it might be helpful to diversify the tools that you are applying to the situation; believe that purchasing Treasury securities rather than private securities is preferable to minimize the Federal Reserve's involvement in credit allocation; or think it might be easier to unwind in the future holdings of Treasury securities than holdings of private securities such as MBS, which might be less liquid or might be seen in the future as tied particularly to primary mortgage market conditions.

On the other hand, you might be inclined not to purchase longer-term Treasury securities if: you think that purchases of private securities such as MBS would more effectively improve conditions in private credit markets and thus provide better support to private spending; or you are concerned that market participants might believe that you are monetizing the federal debt, a perception that might lead to adverse effects on term premiums or, perhaps, on inflation expectations.

Under alternative C, page 4, the Committee would make no adjustment to the policy tools that it is already implementing, and it would not reference any modification to the Federal Reserve's liquidity programs other than those that have been previously announced. Instead, the statement would indicate that the Committee decided to keep its target range for the federal funds rate at 0 to ¼ percent and indicate that it continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time. The second paragraph would note that the near-term economic outlook is poor but indicate that the Committee anticipates that a gradual recovery in economic activity will begin later this year, subject to significant downside risks. The final paragraph of the announcement would note the range of policy actions that are already in train.

The Bluebook also presented an alternative structure for the FOMC statement, based on a suggestion provided by President Bullard. Applying that structure to alternative A, and incorporating this morning's suggested revisions to the policy actions, is shown on page 5 as alternative A′. A′ is substantively the same as A, but it reorders the statement such that the Committee's actions are presented first. In particular, the first sentence of the statement indicates that "The Federal Open Market Committee decided today to increase the size of the Federal Reserve's balance sheet further by purchasing $300 billion of longer-term Treasury securities over the next six months and by acquiring an additional $500 billion of agency MBS and $100 billion of agency debt securities this year." Obviously, this approach gives greater prominence not only to the actions themselves but also to their effect on the Committee's balance sheet. Conversely, this approach gives less prominence to the very downbeat summary of the economic situation in paragraphs 2 and 3, a possible advantage of this approach. However, the flow of the statement may be seen as a bit less logical, in that it presents the Committee's actions before discussing the economic conditions that motivated them.

Alternatives B′ and C′, pages 6 and 7, apply the same structure to alternatives B and C.

The final three sections of the package provide draft directives for the three basic alternatives and their primed variants.

CHAIRMAN BERNANKE. Thank you, Brian. Are there questions? President Evans.

MR. EVANS. Thank you, Mr. Chairman. Brian, in the Bluebook and yesterday we saw a chart of how the unemployment rate and the inflation rate would play out under these different strategies. My question is about alternative A, the largest program that we're considering. Is it plausible/likely/possible that what we're looking at here would be enough? Would the markets look at this and think that the FOMC has taken actions that it believes, if the outlook doesn't deteriorate further, would be enough?

MR. MADIGAN. You're asking about how the markets would interpret this?

MR. EVANS. Is it likely that the Committee would be willing to see this as large enough to put us in a good position and we'd just wait for confirmation of the outlook? Are we even close to that?

MR. MADIGAN. Judging by the simulations that were presented in the Bluebook, I would say that this alternative A is roughly comparable to the green dash-dotted line on page 32, if you happen to have that in front of you. It's roughly the same size, with a slightly different composition. So the effects on interest rates might be similar. Of course, that would not get the Committee, on this analysis, to something comparable to the unconstrained policy.

MR. EVANS. Thank you.

CHAIRMAN BERNANKE. A two-handed intervention?

VICE CHAIRMAN DUDLEY. A quick question: The directives have "up to," and the statements do not have "up to." Is that important? Is that intentional?

MR. MADIGAN. No, that's not intentional. Thank you. We should correct it.

CHAIRMAN BERNANKE. A question from President Fisher.

MR. FISHER. May I just ask, Mr. Chairman, a question of Ms. Mosser? Every one of these statements says that we've launched the term asset-backed securities loan facility. Could you just give us a quick update of where we stand on that, because the wording here might be questioned?

MS. MOSSER. Because the deadline is tomorrow, not surprisingly, we have no one who has signed on the dotted line. We have, however, three very serious issues—two of them auto-related, one of them credit card-related—that appear at this stage pretty likely to go through. There do seem to be at least enough customer-to-dealer contracts signed, or in the process of being signed. My ballpark guesstimate, based on the numbers I've seen, is $5 billion—could be $8 billion—total. Quite frankly, before the machinations of the last week and a half, I don't think we truly anticipated more than $5 to $10 billion in the first subscription. There's been no price discovery in this market for several months. And just on those grounds alone, many issuers and investors might be somewhat reluctant to be first in the TALF.

MR. FISHER. So we can't say it has launched.

MS. MOSSER. Well, we've launched it in the sense that the subscription is open and that lending has happened.

MR. FISHER. All right.

CHAIRMAN BERNANKE. Are there other questions? Governor Duke.

MS. DUKE. I just want to make sure my math is correct and my understanding is correct. When we do the additional $500 billion in mortgage-backed securities, does that increase the pace at which we buy them, or does it extend the time from June until the end of the year?

MS. MOSSER. The $500 billion would largely extend the buying through the end of the year. If the Committee has a preference that those be front-loaded, that would be possible for us to do from an operational standpoint. As a matter of fact, if the Committee would be interested in giving us direction on that, we'd be happy to take it. Honestly, the additional $500 billion would not be a huge surprise to the market. I think the expectation of most is that $500 billion at the same pace through the end of the year is a likely outcome of today's meeting.

MS. DUKE. Under alternative A, by my count it's $500 billion in MBS, $300 billion in Treasuries, and $100 billion in agencies, for a total of $900 billion. Would we expect that to have a similar result as in the note on $1 trillion in a combination of mortgage-backed securities and Treasuries? Is that the result we would be looking for from alternative A?

MR. MADIGAN. I think we consider it to be roughly the same. Our ability to discriminate between effects on one market or another is pretty limited. There's lots of uncertainty around these estimates.

MS. DUKE. For alternative B—which is $750 billion plus $100 billion, I get $850 billion. Would we also expect that to have similar impact? In other words, would the fact that there's no Treasury component matter?

MR. REIFSCHNEIDER. Given our ability to distinguish between them, we wouldn't be able to say that that made a material difference from any other one.

MS. DUKE. Okay. Thank you.

CHAIRMAN BERNANKE. There was a two-hander from President Rosengren.

MR. ROSENGREN. Yes, just a clarification. It would seem that, if the goal is to push rates down and cause a wave of refinancing, then we'd want to be doing the bulk of the purchasing during the period where the refinancing would occur, which presumably would be over the next quarter. If everybody refinances over the next quarter or two, the ability to purchase new mortgages in the second half of the year would probably be pretty limited, if we're actually successful in doing it. It does seem that the goal is not to have an even flow over the course of the year, but to enable rates to get low enough that we facilitate a wave of refinancings and new home purchases. So I think it would be good if we can provide some clarification that the goal is not to spread it out, but to push the rates down and get the refinancings going, which would imply front-loading, assuming the program is successful.

CHAIRMAN BERNANKE. Do you think the front-loading is more important than the announcement effect?

MR. ROSENGREN. I wouldn't want to be constrained to do only a limited amount and have the refinancings cause rates not to go down very much.

VICE CHAIRMAN DUDLEY. You don't necessarily want to save the $500 billion for the second half of the year is what you're saying?

MR. ROSENGREN. Right. If it's appropriate, I'd rather do it sooner than later. I want to get as much bang for the buck in the next two quarters as we can.

CHAIRMAN BERNANKE. Okay. Can we find a phrase that would be added that would say something like "with the greater portion to be done in the first—"?

VICE CHAIRMAN DUDLEY. "Over the next several months."

MR. WARSH. "Increasing the rate of purchases." I think that's what you are trying to get the markets to gather.

CHAIRMAN BERNANKE. Except it's a little bit uncertain, because if we front-load it, then later there's less. Governor Tarullo.

MR. TARULLO. Brian, I just want to make sure I understand the numbers as well, and it comes down to a difference in wording between A and B. In B, you have "increase its purchases of agency debt this year by $100 billion to a total of $200 billion." In A, it just says, "boost its purchases" and "now anticipates purchasing $200 billion." I guess that makes the headline number in alternative A $1 trillion. But, if I understand correctly, it's really an additional $900 billion of authorized purchases. Is that right?

MR. MADIGAN. That's correct.

MR. TARULLO. Okay. I'm just curious. Why is the alternative A today $100 billion less than the alternative A in the Bluebook, which was $500 billion additional MBS and $500 billion Treasuries?

CHAIRMAN BERNANKE. Could I interject something here for just a moment? As I asked yesterday, everyone gave their views, and I listened very carefully to what the options were. What was suggested here today was two approaches. One expanded on the MBS front, going from $1 trillion for this year to $1¼ trillion, with a concomitant small increase in agency debt, but no Treasuries. The other approach was to maintain the same pace of MBS purchases through the second half of the year—subject to a bit of language about timing, in response to the point that was raised—and to open a new front on the Treasuries side; there I was responding to concerns that a number of people raised about monetization and the independence perception, and so on, trying to make it seem more like a step into this arena rather than a big-scale, new intervention. So that was the thinking on those two approaches.

Let me now add, having heard the discussion around the table today, I think I would like to raise a third option, which is the union of the two, which would be the $750 billion of MBS, plus the $300 billion of Treasuries. I'd be open to that as well.

I'm trying to avoid the proliferation of too many alternatives, but what I heard today suggests that some people at least might be interested in yet a more aggressive approach, while still attentive to the costs and benefits of expanding our balance sheet faster and further.

Do I have clarity on sort of what the options are now?

MR. TARULLO. Thank you.

CHAIRMAN BERNANKE. Okay. Any other questions for Brian? President Lacker.

MR. LACKER. My question is actually for Ms. Mosser. If we adopted either B′ or the schedule that the Chairman suggested, and you were to pace it the way you would, what are the chances that the monetary base will shrink in the next intermeeting period? You've got the TAF, CPFF, AMLF, and foreign exchange swap lines. Is there a significant chance that you won't make enough purchases in the intermeeting period to offset other declines in our assets and leave the monetary base shrunken rather than expanded over the period?

MS. MOSSER. If we accelerate, particularly on the mortgage side, and front-load those, I would view it as very unlikely. Spence probably has a better feel on the liquidity programs. A little shrinkage there might occur, but, particularly if we add Treasuries and we are more aggressive on the mortgage side, I would view it as very unlikely that the base would shrink.

VICE CHAIRMAN DUDLEY. You have this one question of the settlement of mortgage securities, though, which might not actually occur by then.

MR. HILTON. You really have to look at what the settlement date is almost.

MS. MOSSER. Yes, that's right. In thinking about the base, because the settlements are so lumpy we probably have to switch a week forward and note that even though the base might shrink one week, it will jump up a lot the next when all of the MBS settle.

MR. LACKER. Do you think the base is likely to increase? Would that be your expectation?

MS. MOSSER. Yes.

MR. LACKER. A couple hundred billion, would you guess?

MR. HILTON. It's not a long intermeeting period, so a couple hundred billion might be a little bit larger than is realistic. It is hard to anticipate where the liquidity facilities are going, but the fact that they have been relatively stable on balance for a couple of months—since late January—makes me think that, without some fundamental change in liquidity conditions, they're probably not going to break in a substantial way one direction or another.

VICE CHAIRMAN DUDLEY. I'm sorry, if I could just add a point. With the CPFF, you had this big refinancing wave that happened late January. You're not going to have another one until late April, and there's going to be less coming due at that time. So that's probably not going to change dramatically. The big question is on the foreign exchange swap side. But that has already come down a lot.

MR. LACKER. The current size is around 400 or 500 billion?

VICE CHAIRMAN DUDLEY. 450.

MS. MOSSER. I think I can say with some confidence that, if we buy a lot of mortgages, by the middle of May it's very unlikely that the monetary base will be shrinking, and it will grow fairly aggressively, because the big settlements in mortgage-backed securities tend to happen in the middle of the month.

MR. LACKER. Just to pursue this a little more, what's sketched out here is $1¼ trillion of increases in our assets above what they otherwise would be. If we were interested in assuring that a certain portion of that passed through to the base, that might call for even more offsetting increases.

Let me ask something operational. If we wanted to be sure that the base expanded, or that it expanded by a certain amount, could you vary Treasury purchases within the intermeeting period in a way that would react to incoming information on the foreign exchange swap usage, and the like, to achieve that?

MS. MOSSER. Yes. I think there might be better tools for doing that, though. Honestly, if that were the guidance given, we would probably go back to doing repos.

MR. HILTON. We can do repos. The other element is our involvement in the dollar roll market as well, which we probably could scale up at a relatively fast pace, if we wanted to. Again, though, we would have to look at the calendar, because those also settle on a discrete date.

MR. LACKER. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. So, President Lacker, just to reiterate the options quickly: The "all MBS" option would be $850 billion—that's $750 billion plus $100 billion. What I will call the "Treasury" option is $900 billion—that's $500 billion MBS plus $100 billion agency debt plus $300 billion Treasuries. The "combined" option is $1.15 trillion—that's $750 billion MBS, $100 billion debt, and $300 billion Treasuries.

My reaction to your question is that, particularly if we front-load the MBS, even though there might be some weekly variation in the base, the very strong trend of the base will be clearly up for the rest of the year. This will certainly make it very clear to everybody that that's the intention, and that will be the result.

MR. LACKER. Well, you understand my concern. There is $1 trillion on our balance sheet that is demand-driven and could roll off in very uncertain circumstances. I'm not quite sure whether that will happen or not. So you can understand why this leaves a fair amount of uncertainty about where the base is going to be at the end of the year.

CHAIRMAN BERNANKE. It would all have to roll off. It certainly would be very unlikely, but okay. Anyone else have a question for Brian? [No response.]

Just in terms of parameters, we have the three substantive options. I want to remind you that there are also two statement options. One is more similar to what we've had before, which states the economic situation first, and then goes through the paragraph on policy actions. We also have proposed an alternative suggested by some comments that President Bullard made that in some ways would be analogous to our old structure in that it would put the policy actions first. For the sake of convenience, let's call that the "inverted" structure—without any derogation implied. So let me now go to President Plosser, if you're ready.

MR. PLOSSER. Thank you, Mr. Chairman. I raised some issues yesterday about asset purchases and policy. I think some of the things that remain questions for our policies going forward include, for example: How do we evaluate the merits of the various programs we have? What are the tradeoffs? Which ones work best? Which ones don't? How do we equate the programs at the margin to get the most bang for the buck as we use our balance sheet?

I think a lot of the discussion yesterday about Treasuries versus MBS had a mixed tone to it, in the sense that part of it was a desire to use monetary expansion to support the economy at large, while some people wanted to use the asset purchases for liquidity purposes or to bring mortgage rates down or to target credit market interventions in certain markets. Certainly, part of the debate about whether to use Treasuries or MBS depended on which side of that fence you were on. So I think we still have some work to do about deciding the policy mix.

But I'm going to throw a monkey wrench in the works. Yesterday the Chairman asked for alternative ways of saying some of this. One of the issues we discussed, and it came out, I think, loud and clear, was that there's a lot of concern about the path of policy. When we announce policy actions—whether they be the TALF, MBS, or what have you—we tend to announce them as quantities. As a result, it's not very clear what happens when that quantity is reached. What happens after that? What will be the next market? What will happen going forward? I think there's an argument that conducting policy in that manner creates a lot of uncertainty in the marketplace about what's going to come next. Are they going to do it again? And, if so, how big would that be? Another issue when we target specific volumes is that the conditionality of those interventions doesn't come through very clearly. It may seem that we are going to do the $500 billion no matter what else happens.

So President Bullard and I—I'm going to implicate him as well—wondered, "Well, is there another way to do this that might be helpful?" We put together a new version of the statement, with the idea that we want to get beyond just announcing one-off programs that we may or may not do again and move toward thinking about saying that we're going to have a plan to increase the size of the balance sheet or increase the size of certain components of the balance sheet over a period of time, and that we'll adjust those growth rates, if you will, as needed, as the economy either worsens or improves.

The proposed wording was passed around—we've called it alternative B″.[6] The idea here was to address the question, "Okay, how else could we communicate to the markets about what our plan is?" Paragraph 1 basically becomes, "The Federal Open Market Committee decided today to continue to increase the Federal Reserve balance sheet through the purchase of agency MBS and Treasury securities. The Committee expects the growth rate of the MBS and Treasury components of the balance sheet combined to average about 10 percent a month. The Committee will carefully monitor macroeconomic and financial conditions and adjust this rate of expansion as warranted."

[6] The statement distributed by Mr. Plosser is appended to this document (appendix 6).

Now, we came up with 10 percent a month. Basically, that would get us to the $1 trillion over the course of the year, which we were talking about yesterday. It's ambiguous about whether it ends up being Treasuries or MBS. It then says we will carefully monitor this expansion at each meeting and adjust it as we deem appropriate—if we need to ramp it up, we can do that, and if we want to bring it down, we can bring it down. The rest of the statement is pretty much the same as the original. We took the rest of what was paragraph 1 and made it paragraph 2, which is basically a discussion of the TALF and the other programs that we've initiated. So it is the same there, and the rest of the statement basically follows B. Again, our view is that we were looking for a way to get us out of thinking about one-off programs or volumes of purchases that we're going to make, and instead we were trying to set a target or objective for a growth rate of some set of quantities. I think there can be debate about whether it should be Treasuries plus MBS. I think President Lacker would probably prefer it to be targeting the base to get the same outcome.

But we wanted to put this on a table as kind of a straw man to get the Committee thinking a little bit about different ways to help us manage expectations better. It's also contingent on economic conditions, which we think is important.

So, Mr. Chairman, I know we surprised you with this, but you asked us this question, so we thought we'd try to come up with an alternative that's worth discussing.

CHAIRMAN BERNANKE. I appreciate it. Thank you. It's interesting, and some may view the lack of specificity between MBS and Treasury as a plus, and some might view it as a minus. But it's an interesting alternative, so I appreciate your doing that. Did you want to talk at all about the choice of the substantive alternatives?

MR. PLOSSER. I have a preference for Treasuries in general, as I discussed yesterday. My preference for Treasuries is not particularly driven by a desire to push down long-term interest rates so much as it is by a desire to help manage the composition of our balance sheet. I'm not as worried about the effect on inflation expectations of buying Treasuries, in part because, if there is a concern about expectations of inflation, it's that I really don't want them to fall. So I am not too worried about that aspect of it, and I do prefer Treasuries. In terms of the magnitudes, I'm sympathetic to expanding, but I don't have strong opinions about how much we should expand.

CHAIRMAN BERNANKE. Okay. Thank you. President Fisher.

MR. FISHER. Thank you, Mr. Chairman. First, to state the obvious: We're at the zero bound, we're resorting to extraordinary tools to offset the deflationary and other consequences of overly tight monetary policy, and we have to deploy that extraordinary tool kit effectively, deliberately, and with clarity. President Lockhart injected a little humor by congratulating you on your having an interchange named after you and pointing out there is an off-ramp. There is no off-ramp right now, unfortunately. And President Pianalto pointed to your *60 Minutes* performance, which I also wanted to applaud, except to point out there was one weakness: You were opposite George Clooney in that time slot. [Laughter]

I mention these things because I'm sympathetic to what President Plosser mentioned, in that, (a) there is no off-ramp, and (b) we have to think way ahead. I talked two years ago about decision trees. We at least have to think of where this highway is possibly going to take us. The ad hocery of what we are doing is a bit of a concern to all of us at the table; but let's acknowledge the fact that we are in extraordinary circumstances, and we have to play ball according to what's on the field.

I do have a preference, as I stated yesterday, to focus on where we have demonstrated extraordinarily well our capacity to play, which is in the mortgage-backed securities market. I'm very sympathetic to President Rosengren's argument, particularly as to timing.

Although I don't have a vote in this matter in this cycle, I would support alternative B. I still have concerns about being viewed as monetizing deficits. I think there's a possibility that the political class—that is, the legislature—will ask for still more. But it's not clear to me whether buying Treasuries might be interpreted as our accommodating fiscal profligacy, although I understand the circumstances of the moment, which are certainly trying. I think Governor Tarullo offered a very sophisticated approach to this yesterday, which is to do things in proportion; and I could live with the alternative that that has the lesser weighting on Treasuries. I do think it is important to exercise our muscle in the mortgage-backed securities market. My contacts tell me that when you get to the 4½ percent level, you do have some effectiveness, and I think that's clearly an area where we want to have extraordinary effectiveness.

As to the statement itself, Mr. Chairman, I'm not sure why we're emphasizing the job losses and all of the things that, as I said in my note, you're aware of even if you live on Mars. I do worry about that, given the fact that we are the institution that everybody's looking to—in part because we did get out ahead of the rest of the world. We're viewed as a precious institution with, I think, superior credibility compared to all of the other institutions of government at present. I'm not sure it's helpful to keep pounding on the negative. The economy is contracting, and it continues to contract. We needn't say more. The important thing is that we say what we're going to do about it, and we do so with clarity.

Let me add parenthetically that I appreciate your moving the fed funds decision down to where it should be, which I believe both of us asked for last time—that is, moving it down in terms of order of priority.

I want to conclude with one last statement. My greatest concern is the TALF. I think I made that obvious. I would caution you to be very careful on this public–private partnership. I made my living doing extraordinarily complex transactions—taking distressed companies, restructuring them, and taking the equity out—and I was confused yesterday by what was described. But I'm more worried about the politics of it. I think we have to be very careful with our precious franchise in dealing with an embattled opposite, particularly on the Administration side, so that we don't jeopardize our special standing in the community by appearing to accommodate political necessity and exigency. I would urge you, and this Committee, to stay away from the legacy assets for now. And I would urge you to be very careful about any commitment to the public–private partnership concept. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Plosser.

MR. PLOSSER. Pardon me. I missed one point I wanted to make in my comments. President Fisher reminded me of it. In our B″, one of the things we changed was the description of the economy, which, Jim and I both agreed with President Fisher, sounded panicky. We changed what I think was in paragraph 2 to take out a lot of the detailed description and wrote, "The decision reflects the Committee's view that the economy is undergoing a severe contraction," which it is. And we said "the near-term outlook is weak." The other change in the same spirit is in the rest of that sentence: "the Committee anticipates that market forces and policy actions will contribute to a gradual resumption of sustainable economic growth." I think in the original it says that policy actions alone will stabilize the world. And, frankly, I think creating an impression that the only game in town is policy actions and that market economies have no contribution to make in this stabilization is setting us up for failure and a credibility problem. So we added the reference to market forces. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. Thank you. President Bullard.

MR. BULLARD. Thank you, Mr. Chairman. I'm going to talk a little more about this B″ option. Let me just follow up on some of President Plosser's and some of President Fisher's comments. When we think about optimal policy under interest rate targeting, which is what we're all used to, we decide what we're going to do and we communicate it. It has a path because you've got a rule in mind about how you're going to operate policy in the future, so that gives you a projected path, and that allows the private sector to coordinate on that path. That's all part of how the equilibrium works and how the optimal policy works. What I'm concerned about right now, and in the last couple of meetings, is that we're not doing that. Because we hit the zero bound, the interest rate targeting regime was taken off the table by events, so we're ending up with these one-time announcements, with round numbers, and that makes the future path of policy unclear. The private sector, as I said yesterday, will try to guess what the FOMC will do, regardless of whether we say anything or not. For years and years we didn't say anything. But we can do a lot better, I think, by reducing that uncertainty and by laying out some kind of a path—"here's what we're thinking"—and making it contingent, of course, on macroeconomic events. So that's what we are trying to get at here.

Clearly, the focus is on asset purchases around the table, so this B″ certainly talks in those terms. A problem that I'm concerned about is that pre-committing to a particular number without making it contingent on macroeconomic developments may not be wise. Incoming data may not match up with the commitment that you made. It would be the same thing under interest rate targeting. You would say, "we're going to go somewhere today, there's a projected path out there," but, of course, it's always dependent on incoming data.

Alternative B″ tries to address these issues, and I might say it's equally well called A″, because it's not really tied to particular amounts. In fact, you might end up with a little more in total here. It's very aggressive, let's put it that way.

First, the form of the statement: You say the main thrust of policy at the beginning of the statement, which is something I'd like to see us do, and we certainly did that under the interest rate targeting regime—we would say right away what we did with the fed funds rate. The fed funds rate at zero is not news right now. Even the fact that it's going to stay at zero for a long time is not news right now. So I just moved that part down in the statement. Most of these statements have that.

There are three principles behind this B″, so let me just talk about them. First of all, there is the agency MBS plus Treasuries as a group. Second, there's a growth rate feature to it, so you talk in terms of growth rates instead of specific numbers. And the third principle is that you adjust in response to economic developments, so you have this policy rule aspect.

Let me address all three of these. First, the agency MBS plus Treasuries: This is certainly the type of large-scale asset purchases that we've been talking about. It avoids mention of balance sheet growth as a whole, because you've got volatile aspects of the balance sheet that are under what I would call liquidity provision. There you've got the TAF in particular (it's whoever shows up for the auctions), you've got the swaps, and you've got the commercial paper facilities. That's now about $1 trillion, as President Lacker was pointing out. It's kind of volatile. It's liquidity-oriented. Our own projections expect that to run off as financial conditions improve. So this version just sets those programs aside and thinks about managing them separately.

The agency MBS plus Treasuries as a group provides some flexibility. As Trish has pointed out, MBS can be lumpy. You've got this refi wave coming in. So you could do more MBS at certain points, and you could do more Treasuries later, and you don't have to specify it at the level of the Committee. There are good arguments on all sides about the choice between MBS or Treasuries, and demerits on both sides, so I think maybe the thing to do is just mix them together and provide some flexibility. Also, my own view on this is that they're both backed by the Treasury effectively, anyway, so I don't see a lot of difference.

Now you've got this persistent component of the balance sheet, which is the MBS plus Treasuries, and that's going to grow at this 10 percent approximate rate. Frankly, it's an extremely rapid rate, but that's what we want because we're in a very sharp downturn here. Then, you've got these temporary components of a balance sheet, which are going to run off, hopefully, when the financial market turmoil abates. And it's this underlying trend that you want to get the markets to focus on, as the Chairman was saying a minute ago. So this is a plan for expansion in the persistent components of the balance sheet, and it helps coordinate private sector expectations and reduce uncertainty about policy going forward. This has been a key private sector concern, as we've heard around the table. All of the contacts are saying to us, "What are you guys doing? I don't understand the policy. There are all these announcements. I can't figure it out." So maybe this is a simpler and more transparent approach, without getting into a lot of specifics about particular asset categories.

The biggest thing for me, and perhaps for President Plosser, is that you're not pre-committing. You can adjust as you go along. This is a plan, but, like an interest rate path, it would be contingent on macroeconomic developments, and you're not stuck with a particular number going forward. That's the third part: You'd be able to adjust this in response to economic developments. Again, we're going to be at zero nominal interest rates for a long time, probably globally. I think it's important to try to lead globally and give a signal to other central banks about how they might implement their policies. This is a kind of a feedback rule. Obviously, we don't know what the rule is at this point, and we don't know how much we will react to incoming developments. That's something we have to learn over time. Hopefully, we can figure that out as we go along. But this would get us going in that direction and provide a credible replacement for our interest rate rules that were taken away from us by events.

That's my case for the main part of it. I'll talk just briefly about the other parts of the statement. The description of the economy, paragraph 3, is whittled down from the text in some of the other statements. That's in response to President Fisher's comments. We can certainly say that the economy is in bad shape, but I don't think we have to say too much more than that. Obviously, because we put convenient numbers on here, you can mix and match with your other favorite descriptions of the economy.

I agree completely that we should be very aggressive in this situation. But we need to be aggressive in an organized way. Also, we're taking unprecedented actions. You have to be careful about going too far in a direction without a plan. We don't know what the effects really will be; our models really don't tell us too much about it. So this alternative holds out options for adjustment as data arrive. Hopefully it would provide better communication to the private sector, and hopefully you'd get a more effective policy out of that. A lot of communication is not just us talking, but it is saying "I've got a clear path for future policy."

I'm very concerned about deflation near term. I'm concerned about a deflation trap in which you go to this new steady state and get stuck there. But a medium-term risk is that the economy behaves sort of like normal, and if a normal recovery takes hold, then you've got a possibly explosive inflationary situation. But that's down the road. You have to avoid the deflation trap outcome first. Maybe if we did get to that medium-term stage, this would set us up to be able to react to that situation a little better.

CHAIRMAN BERNANKE. Thank you again for constructive suggestions. I have a couple of questions. I do want to point out we did try in alternative A to create a reaction function element in the very last sentence, where we say, "We will be assessing whether a faster pace would be helpful." Essentially, the pace will be varying as conditions change—it's hard to be more specific than that. I guess I have one question for you and one for Trish. For Trish, maybe you can help me. What do you think would be the effect of not specifying the breakdown between Treasuries and MBS?

MS. MOSSER. We'd immediately get the question: What's the breakdown between Treasuries and MBS? And what are you going to do about agencies? But the agency debt market is the simple part to answer, because that's a much smaller market. I think we'd end up having to give a hint, or they would take away from our first two operations what your preferences were, whether that was correct or not.

MR. BULLARD. I took it from the discussion that people would like to front-load MBS to the extent that's feasible. But this formulation would let you still have growth later on, if you want.

CHAIRMAN BERNANKE. I have a question for Presidents Plosser and Bullard about the flexibility you get by saying just "per month" without any specification of timeframe. I imagine you would, therefore, have less of an announcement effect, and it would be more difficult to do a persuasive front-load in that case.

MR. BULLARD. I don't know why the announcement effect would be any different. It adds up to the same amount.

CHAIRMAN BERNANKE. For example, one thing you could say—I'm just trying to be helpful—would be "a combined average of about 10 percent per month in the next few quarters," or something like that, to give a bit of a horizon.

MR. BULLARD. Yes, sure.

CHAIRMAN BERNANKE. This also relies on people being able to do geometric calculations. [Laughter] I'll put that aside for now.

MR. PLOSSER. Well, actually, Mr. Chairman, we did debate whether or not there ought to be horizon on it. But I think you could give a horizon if you wanted to, as long as you kept the conditionality that we will monitor this going forward and that it's subject to economic and financial conditions.

MR. LACKER. I am not sure I understand one point about this. Presidents Bullard and Plosser propose a geometric path. But why not pick an endpoint and go linearly to that? That is what we are doing with the MBS so far. Doesn't that make more sense? We could still call that 10 percent per month.

MS. MOSSER. I would say in fact, to President Rosengren's point, one might actually want it to be front-loaded.

MR. PLOSSER. I think we say an "average" of 10 percent a month.

CHAIRMAN BERNANKE. Okay. Let's go on, if I might. President Rosengren.

MR. ROSENGREN. This was the most depressing go-round in a year and a half, and this was a really bad year and a half, so it highlights that we're far away from where we want to be, both in inflation and in unemployment. And in terms of communicating with the public, I think that's what we're communicating to the public: We're not where we want to be, and we want to get there as quickly as we can.

I don't think simple rules on the balance sheet or the monetary base are appropriate. These are different programs for different problems. If the interbank market is disrupted, I would expect swaps and TAF to go up. If we have a real problem in other areas, I'd want to do significant asset purchases. These are not substitutes, and just having either a balance sheet or a monetary base rule is assuming that these programs are substitutes for each other. They're dealing with different problems.

I think this is an opportune time to push down rates as significantly as we can. I think we should be very aggressive. I think everybody's discussion around the table indicated we should be aggressive. I like the idea of heavily weighting on MBS purchases; I think that will be the most effective. I also like the idea that, if we're going to try to get the most bang for the buck, given that these are experimental programs, we ought to try at least to see what happens with the Treasuries as well. So my preference would be to do the combination of A and B, which is the $1.15 trillion total, to try to have as big an effect as possible. And I would try to front-load it so we get as much impact in the spring as we can. Thank you.

CHAIRMAN BERNANKE. Thank you. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. Obviously, sentiment is pretty gloomy around the table, and there's a fair amount of consensus that we want to make monetary policy more aggressively stimulative with our actions at this meeting, and we're grappling with how to structure that shift. I think it makes sense to embark on a fairly aggressive asset purchase program, but I think we ought to admit that we're fairly uncertain about how our actions are going to go about affecting the economy. This isn't different in principle from four years ago—then we were unsure about how another quarter point one way or another was going to affect the economy. But the magnitude of the uncertainty is quite significant here.

We've talked around this table for a year and a half about different theories of how these programs and our actions are affecting the economy. We've talked about credit market frictions, asymmetric information, and other frictions that might inhibit certain markets' ability to respond adequately to disruptions. We're not going to settle that debate here. We've also talked about the effect of changes in the monetary base. Banks appear to have absorbed a humongous amount of reserve holdings without a readily discernible effect on a lot of other aspects of their behavior. It suggests banks are more or less indifferent between holding reserve balances and other assets that function as very liquid reserves. And, if so, that rationalizes the view I've heard some express that increasing the supply of bank reserves is generally going to be ineffective at the margin. And there are some readings of historical episodes of very low interest rates that are consistent with that as well.

But this logic has its limits. Commercial banks hold only about $1.3 trillion in Treasury and agency securities, so if there's a flat spot in the demand curve by banks for bank reserves, it might not take that much more of an increase in our balance sheet to get past that flat spot. And if we do that, I think there's bound to be some effect; there just has to be a finite upper limit on this flat spot of the demand curve for reserves. And even before that, I'd expect some rates of return to have to change. I have a bank in my District that held $136 billion in reserves a couple of days ago. Surely the configuration of repo rates and the other instruments they operate in must have an effect on their willingness to hold that much in reserves. It's really hard to know where that upper bound is—where the end of the flat spot is—because we don't have much data to draw on; but I think it must be there. So, as I argued yesterday, I think we need to recognize some uncertainty about which theories are the right ones to rely on and how to think about what we do.

I take the credit easing we've done—program by program, aimed market by market—as arguing that more of those programs in more of those markets is more stimulative than fewer in lower dollar amounts. I think that the logic of this focus on the monetary base also suggests that more monetary base is more stimulative than less. So, in the current setting, I think trying to ensure that we at least achieve a certain amount of growth in the base is consistent with both views and worth pursuing. That's what has motivated my line of questioning for Patricia Mosser, and it motivates why I'd like to suggest that we put a clause in the directive, at the end of sentence four, that says, "but should ensure that the monetary base expands by at least X billion dollars during the intermeeting period." I don't think we should conduct policy by slapping 47 constraints on the Desk at every meeting, but it strikes me as a small thing to ask in order to be sure that the stimulus that might be withdrawn as some of these programs roll off is offset as we go forward.

I would favor the larger program that you outlined, Mr. Chairman, with the $300 billion, the $750 billion, and the $100 billion increases. I like the idea behind the suggestion of Presidents Plosser and Bullard about putting a commitment to a pattern of purchases in the statement. But for the reasons I just outlined, I'm not sure that gets us where we want to be. It seems to me that if we did that, and yet the balance sheet went down by the end of the year because of a bunch of other stuff rolling off, I'm not sure we'd be persuaded that we had made monetary policy more stimulative or eased credit. So I'd like to see us focus on the overall size of our balance sheet and our programs and the base. That would provide as well with an overarching framework, a kind of coherence to what we do, to convey the sense that we're not just responding market by market, but that we have an overarching conception of how we're providing stimulus and how we're going to get through this. And I share the view of Presidents Fisher, Plosser, and Bullard that toning down the language would be useful. It has always been the case that there's a mapping from words we use, like "somewhat adverse," to people's interpretations, which are much scarier than "somewhat adverse." I think we're stepping outside that mapping when we go as far as we did in the statement as it's drafted.

CHAIRMAN BERNANKE. First, Trish and Spence, would you folks think about a sentence that could be added to one of the directives, to the effect that "The Desk will strive to ensure that the monetary base" or "the size of the portfolio," or something like that, "has a positive monthly growth rate," or whatever you think would be realistic or manageable? We don't want to put in something that, just for operational reasons, doesn't work.

MR. EVANS. I've been listening to this, and I'm sympathetic to the different ways we'd like to try to characterize a path. I think it's very difficult. "Ensure" is a strong word. I had been thinking about maybe something weaker like, "We would expect to see the base grow," which is sort of an indicator of how we think things are going, but not the policy rule itself.

CHAIRMAN BERNANKE. "It is the expectation of the Committee that the base will be growing over time," or something like that? Does that help?

MR. HILTON. Balance sheet or base?

CHAIRMAN BERNANKE. Federal Reserve liabilities? I'm just making this assignment, and they'll come up with a suggestion. We'll discuss it at the end, okay?

MR. EVANS. Perhaps with a clause "conditional on stability in certain lending facilities."

CHAIRMAN BERNANKE. We'll make some kind of attempt. It's just a good faith effort, that's all.

MR. LACKER. If I could suggest, because of the possibility of SFP or Fed bills, you might want to try both the base and the balance sheet, rather than choose one.

CHAIRMAN BERNANKE. Well, we'll worry about SFP when we get it. [Laughter] Let me address this issue about pessimism. I just want to point out that the January statement was isomorphic to what we're proposing to say in this one. It's in your handout. It's not exactly the same, but it's very similar. The only difference is that the last sentence in January was that the "downside risks are significant," and we leave that out of this one.

MR. FISHER. Mr. Chairman?

CHAIRMAN BERNANKE. Yes, President Fisher.

MR. FISHER. We did state it before. Therefore, why don't we just say "continues to contract" or "contract severely?" Again, we're hammering this point, and I believe we are beginning to be scary. Just for a moment, I want to go back to your *60 Minutes* show. I think that was a positive. It was a lift, and we engendered some confidence. Here we are just pulling the rug out again.

CHAIRMAN BERNANKE. Okay. I hear the point.

MR. LACKER. It's the "severe contraction" phrase, I think, that gets attention.

CHAIRMAN BERNANKE. Okay. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Let's see if I can hit some of the highlights here. I certainly agree with everybody else that we need to be going in with everything we can under the current circumstances. And the question is: What can we do, and how can we explain it?

I favor your combined alternative A plus B. I think that qualifies within the limits of what we can do as a good effort under the current circumstances. As we discussed yesterday, what we do know is that asset purchases seem to be the most effective thing we can do. We've seen the MBS purchases be effective. I think it's a good idea to use all of the tools, and buying Treasuries is one of the tools, so I think we ought to include Treasuries. I think there's enough evidence from the event studies that that will have a positive effect on financial conditions. I'm not worried about the issues of monetizing the debt or inflation expectations, given the size of the output gap and given the fact that we're working on exit frameworks at the same time and we've strengthened our discussion of the long-term inflation objectives.

In terms of shifting the emphasis to the base, President Lacker, you talked about uncertainty in linking our portfolio to the economy. I think that goes for the base as well. I actually asked a senior official at the Bank of England how he would explain how increasing the base and increasing the money supply were supposed to affect the economy. I got kind of a shrug of the shoulders and "Well, we've run out of this other stuff, so we're going to talk about this stuff now," rather than a really coherent explanation of how the transmission channels run from the base to the money supply to the economy. So I guess I'm not ready to put my marbles entirely in that particular basket yet. In particular, I can't quite link the short-run fluctuations in the base—the meeting-to-meeting or week-to-week fluctuations—to what we're trying to accomplish. I think it depends a lot on why the base would go down. If it went down because the whole demand for credit was going down and the economy was weakening, then we ought to be leaning against that and trying to increase the base. But if it went down because markets were working better or because, for example, Europeans had better access to dollar funding, I don't think that's something we necessarily have to lean against. I do think, under the current circumstances, seeing a long-term upward trend in the base is useful and useful discipline on the Committee. But linking to a month-to-month growth rate or meeting-to-meeting fluctuations within that long-term trend—I don't think that will help market confidence, I don't think that's really going to be useful to us, and I don't think it will be seen as putting a new framework that everybody understands around monetary policy. Broad money growth actually has been quite strong in the United States. It was at 14 percent plus in the fourth quarter, and 10 percent in the first two months of the year, so we're not seeing that kind of tightness.

I agree with President Fisher that the TALF is complex and difficult. This is a difficult situation. I think we're constrained, as I said yesterday, by various laws and regulations about what we can do and what's politically possible in this situation. So it's very uncomfortable, but I'm not sure we have any alternatives other than the asset purchases on the credit side of the balance sheet. And I think we ought to just push ahead and make the best of a difficult situation. Certainly doing something about legacy assets is very critical to the health of the banking system. If we can contribute, I think we ought to do so, without jeopardizing our ability to carry out monetary policy over the long term or taking credit risk on the balance sheet.

On the various wording issues, I'd prefer alternative A or A plus, or whatever it would be in your combined alternative, Mr. Chairman. As you can tell from my previous comments, I'm not sure that saying something about the growth in the base on a month-by-month basis or the growth in assets on a month-by-month basis would actually reduce uncertainty. I think the markets would kind of wonder what that was about. Maybe we could prepare the way. Maybe we should do some research to look at how these things are linked together. But right now, what they expect us to do is talk about the amount we're going to buy. I think the fact that we're leaning towards MBS is important. So I'd go with the wording of alternative A.

My problem with A′ is that I'm imagining what it might be like if we didn't take any additional actions at the next meeting. Suppose at the next meeting we just decided to continue with what we're doing, then I don't know what A′ would say. So I'm more comfortable with the ordering of the paragraphs in A than I am with A′. On the first paragraph, I did think the end of the first sentence, "…the economy is undergoing a severe contraction and that the outlook for the next several quarters has worsened," could be read as suggesting we expect a sharp decline in the economy for several quarters. So I certainly would cross that out. On the rest of it, I wondered, as you did, Mr. Chairman, about cutting back on all of the detail as compared with last time, whether people would notice that. I'm kind of indifferent and will go along with wherever the Committee wants to come out on that. I do think we need to say that we're in a contraction, the near-term outlook is weak, and we expect things to stabilize later.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. If I can respond very briefly to Governor Kohn, I agree with everything you said about uncertainty, about the mechanisms by which changes in the monetary base are transmitted to economic conditions, and about the difficulty of articulating how those mechanisms would work. I wouldn't advocate putting all of our marbles in that policy transmission mechanism. I'd just note that it's a viable contender, and we ought to act as if that might be how we're affecting the economy. Hitting a target for monetary base growth, plus or minus, isn't what I was advocating. I was just thinking about making sure it's at least as stimulative as we think it ought to be. I appreciate his comments. Thank you.

CHAIRMAN BERNANKE. President Hoenig.

MR. HOENIG. Thank you. As we talk about this statement, I think it's sadly ironic that, after we've doubled the size of our balance sheet, we're having a conversation about being worried that it may shrink a little bit. It's incredible to me that we would have that. And I agree with what Governor Kohn said in that I don't think we should start talking 10 percent monthly growth or whatever it is. We're trying to deal with a broken intermediation and banking system at the same time, and I don't think we can turn it into a monetary policy instrument in terms of how much we expect the balance sheet to grow at this point.

With that, I would say I am much more in favor of statement B as we had it. I would admit that the banking system is broken. That's part of the reason we're doing the TALF. If we're going to expand and we're going to address the broken intermediation process, we should focus on mortgage-backeds. That's what the idea was to begin with. Let's stick with it. If we now introduce Treasuries into that (1) I think it's only going to be confusing, and (2) I think we do have to look long term. Our introducing purchases of longer-term securities farther along the yield curve sets a precedent, and I don't think it's easy to back off from that once we get through this mess we're in right now. So that's why I prefer B.

I also want to take just a minute and talk about the legacy TALF. There's reference to populist reaction to this, and I actually think that this reaction is justified in important ways. We ought to think about that, because people are now confused between TARP and TALF, and I think when we add the legacy TALF, it's going to confuse things even more. The reason that they're reacting to it is TARP. I agree that it was necessary to keep from having a meltdown, but the execution of it was so confusing and so inequitable across the system that it created great backlash. Some of the backlash was very justified—for example, when you have some banks being told, "You're going to take it," and a thousand other banks being told, "You can beg for it," and following that up with changing the rules, you're not going to get anything but a backlash. I think that's important to keep in mind.

So as we think about going forward, I come back to President Fisher's point about needing a decision tree on how we're going to deal with these legacy assets. Our getting involved in the legacy TALF, as I've heard it described to this point, is, I think, very risky—very dangerous, almost—in terms of what the outcomes might be, because there aren't clear, defined decision trees indicating who's really going to be accountable for what. We need to get that clarified before we have another reaction like the one we had recently.

Finally, I do want to come back to something Governor Kohn mentioned yesterday in reference to my comment about using excess reserves to help manage the balance sheet and set the rate floor. I know that it got off to a rough start, but I think we are getting our sea legs and the industry is getting their sea legs. If we start issuing Fed bills, I think we are introducing another tool that will start out with the best intentions, but expectations will be raised, how we use it will be brought into account, questions will arise about trying to get around debt ceilings and so forth. I think we should try to avoid that if we can and see if we can use our interest on excess reserves as a management tool. So with those comments, I'll again say I'd go with B. Thank you.

CHAIRMAN BERNANKE. Thank you. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. As I said, I think we're in the midst of a very severe recession—it's unlikely to end any time soon. The optimal policy simulations would take the fed funds rate to negative 6 percent if it could, and because it can't, I think we have to do everything we possibly can to use our other tools to compensate. With respect to what we should do today, my preference is for the combined alternative that would combine $750 billion of mortgage-backed securities, $100 billion of extra agency debt, and the $300 billion of Treasuries.

I certainly support the MBS purchases. I think they're likely to have a very positive effect on the housing market, particularly now, and I certainly agree with President Rosengren's suggestion that we should front-load the purchases for the reasons he gave. I said yesterday that I would also support purchases of Treasuries. I think it would be useful to begin that now. I favor diversification of what we do, given the uncertainties about the impacts of any of these programs. There's a principle elucidated by William Brainard 30 years ago that, when policy actions have uncertain effects, you should simultaneously use all of your instruments, and I think that's a worthwhile principle for us now.

A couple of things on language. One of the differences between A and B concerns the characterization of how long we plan to keep the fed funds rate low. A states "for an extended period," while B uses the phrase "for some time." The fed funds futures market at this point seems to expect rate hikes next year. That's not our own expectation, and to try to align market expectations better with ours, I would like to see the switch to "an extended period" as in A. With respect to A or A′—that issue of what goes first—I could certainly accept either. I was positively inclined toward A′ on the principle that it makes sense—and we've always done this—to state right away what the policy decisions are. Now the focus is not on the fed funds rate, so it makes sense to state that we've decided to do such-and-such with respect to programs. But I think that Governor Kohn has made an excellent point, raising the question, "What will we do if we don't have any action on a particular day?" It may be difficult; we don't want to keep shifting from one thing to another if we can't envision how we're going to write that on the day we don't do anything new. I guess I would agree that it's better to stick with the A formulation.

With respect to alternative B″ that Presidents Bullard and Plosser proposed, I really thought it was a very worthwhile and constructive idea. There are aspects of it that I liked and that I thought were quite sensible, such as suggesting some conditionality of what we might do relating to economic and financial conditions and having some flexibility in the composition of what we do. I thought that was very interesting and useful. But I would emphasize that I don't agree with the underlying theory that says that there is a relationship between the size of the monetary base and our impact on the economy, and I would associate myself with the comments of President Rosengren and Governor Kohn on this. So I don't like the language that suggests an emphasis on the size of our balance sheet and the size of the base. I think we have a real theoretical disagreement among ourselves as to exactly how our policy works, and I just wouldn't endorse going in that direction.

CHAIRMAN BERNANKE. Thank you. President Bullard.

MR. BULLARD. Just to respond a little bit, this doesn't say anything about the monetary base. This says large-scale asset purchase done in a certain way, which, I guess, is what our model has said. This is just a way to set the asset purchases—that's my intent.

CHAIRMAN BERNANKE. President Evans.

MR. EVANS. Thank you, Mr. Chairman. As I said yesterday, I think that it's important that we do something big, so your combined proposal is closer to that for sure, and I definitely think that we should diversify our actions. I'm a little concerned that we're not going to have a lot of good evidence on how effective these programs are for a few quarters. Maybe we'll be able to interpret something from how the yields move around, but they also move around a lot anyway. We like to take credit when they move in the right direction. And then other things happen. I don't know—it's very difficult. The delays are: It takes time to implement, it takes time to have an impact, and it takes time to assess. So as President Yellen indicated, we don't have enough confidence to bank on a single nontraditional channel, I prefer doing more of these.

I am a little sympathetic both to the discussion about the usefulness of indicating something about the timing and to the way that Presidents Plosser and Bullard characterized this in terms of growth rates. What did seem to come out in the discussion that I, at least, was not aware of, was how we intend to play these purchases out. There are good market reasons for the way they're done, and the markets understand that. So finding some way to provide that information, I think, would be useful. I can see why the growth rate is attractive, but indicating front-loading or something about the time element seems to be important.

We do have an awful lot of programs in place that are intended to be stimulative. There's everything that we've done, with the TALF increasing, and there's what the FDIC has done, with the TLGP. I don't believe that we've seen anything in terms of the outlook for what the FDIC part of this new program, with the Treasury purchasing bad bank assets, would be either, but presumably that would be stimulative as well. By the time we put all of this in place, we've got a lot that should be helping out. So the question I have is how to quantify what is enough. As Governor Kohn mentioned, we should be doing everything we can do, so I think the combined proposal is better. Frankly, I don't understand why we couldn't improve this to $500 billion in Treasuries, too. We're a little arbitrary, it seems to me, in terms of the total magnitude.

I would like to be able to point to something like our Bluebook analysis—an analysis where we think that this is as close as possible to our best model-based thinking, on what the optimal policy response would be to reach the best we can achieve for the unemployment rate, recognizing that there are outcomes we cannot achieve. The reason for wanting something like this is, I would like it to be big enough now so that we can shift the hurdle for additional action at the next meeting more toward "the outlook has now deteriorated further, and we need some type of action." Because, at the next meeting, we're still going to have calls for "What's next? What's next?" We know how to think about responding in terms of the fed funds rate and where the target is, but the target for asset purchases is less clear, so that's why my preference is for more now so that we can shift that burden. I'd be willing to expand the Treasury purchases to $500 billion, but nobody else has indicated that.

Finally, I think that we can spend an awful lot of time trying to get the wording exactly right so that we're all happy with it. I think it's going to be incumbent upon all of us to make some public comment. When we talk in public, some of these issues will come up, and I think some of it will naturally be fleshed out if there are residual uncertainties. Obviously, when you speak, Mr. Chairman, you clarify things quite a bit, but there might be some things for the rest of us to say. Thank you.

CHAIRMAN BERNANKE. The rationale for a slightly smaller purchase of Treasuries is that we don't know what the effect will be, and it's kind of a "toe in the water" thing.

MR. EVANS. I guess I didn't indicate that I do prefer alternative A the way it's written. In terms of the next meeting, the alternative A′ issue could be dealt with by saying something like "the Committee decided not to change its policies or its programs."

In order to shift the burden, I would like to consider whether there is some language such that "with today's action we anticipate" this better outcome in the last sentence. That would help a little bit there, but it's just a suggestion.

CHAIRMAN BERNANKE. I am informed, President Fisher, that you have to leave for a plane. I am also informed that today is your 60th birthday. Is that correct?

MR. FISHER. What a nice way to celebrate my birthday. [Laughter] With people I greatly respect, and I just want to say I hope I live to be as old as Don Kohn. [Laughter]

CHAIRMAN BERNANKE. We do have to move along here. President Lockhart.

MR. LOCKHART. Thank you, Mr. Chairman. I think the case for increased asset purchases is pretty compelling. It's the sense of the Committee, and certainly I agree with that. So I have to think through a series of other decisions. The first one has to do with scale, and my thinking coming in was that the scale needed to be proportionate to the deterioration in the outlook. Speaking at least for myself and the Atlanta analysis, clearly, there has been deterioration since January, but it's within the range that I would have assumed at that time was plausible. So I'm a little concerned about overreacting. When we first got the alternatives, alternative B was $500 billion, and that, of course, was entirely in mortgage-backed securities and agency notes. Yesterday we learned that the TALF is likely to roll out slowly. That's information that, I assume, is not going to be understood by the public. It would probably undermine the program if we said that we expected that. I had factored the TALF into my sense of proportional response. So I favor the alternatives that are below $1 trillion dollars. I don't want to overstate this, but I think we don't have good guideposts for how to size the action, so I think it's reasonable to ask: Will the public infer from our actions that we know something that they don't, and is this response of over $1 trillion—which will probably get some headlines—really a signal that things are even worse than they actually are and in that sense could dig us a little bit deeper?

Regarding timing: if we go with the mortgage-backed securities alternative, I do favor the views of President Rosengren that there's a chance of accelerating that and making it have high impact in the near term. I can support the Treasury idea. But I actually think the central question is the choice between Treasuries and mortgage-backed securities. I can support Treasuries, but my bias really is to favor the mortgage-backed securities option, so that would be one of the option Bs. I like that for its certainty, its impact on housing, and its clarity in communications. As I mentioned yesterday in my comments about communications, certainly what I'm hearing is that many of our constituencies would prefer simplicity and not a lot of new programs, so I'm leaning against the Treasury purchases because it adds complicating factors. But if we are going to support the Treasury purchases, I endorse Governor Tarullo's suggestion that we explain why we did it very clearly. For example, if we are doing it for liquidity reasons, then we should explain that; if we're doing it for the purpose of scaling up the balance sheet, we should explain that; if we believe that there are spillover effects, we should be explicit about that in our rationale.

Regarding statement content, I have some sympathy for the version offered by Presidents Plosser and Bullard, but I'm not sure we can avoid quantities. I think the logical question that the press is going to ask, having been conditioned to hearing quantities, is: "How much does this add up to?" It's very hard for us not to provide at least some estimate of that. Conceivably there is some way of crafting language that would address both the pace of purchases as well as the ultimate quantity. I don't know how specific we have to be in the directive to make it a workable directive. So I'd leave that up to the Desk. I'm also okay with toning down "severe contraction"—that was my original reaction when I read the alternatives a few days ago—to something that's not quite as stark as that. Regarding statement structure, I don't have a strong feeling. I think we have two options. You either have a structure that builds up to the action, which has been our traditional approach, or the action followed by the rationale. I have a slight preference for building up to the action, based on Governor Kohn's comment, namely, what happens if we don't, in fact, have an action. We certainly want to be consistent going forward, as much as we can, on how these things are put together. So given all of that, where I come out is in support of alternative B, but, when it comes down to the vote, I will support A, A′, or A plus or B [laughter], or B′. Yes, I'll end with a reference to Charlie Brown: You know, sometimes I'm wishy-washy and sometimes I'm not. My definitive support is for alternative B. Thank you, Mr. Chairman.

CHAIRMAN BERNANKE. President Lockhart, on the issue of explaining the Treasury purchases in alternative A, if we do the combination, we'd want to import the sentence from alternative A that starts with, "Moreover, to help improve conditions in private credit markets, the Committee decided...." So that follows up the previous language and explains that we're not monetizing the debt and so on. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. It is clear to me from our discussion of the outlook that more action is needed, but as I said earlier, I also think we need to focus on the clarity of our communications in order to build public confidence. Looking over the options that were presented today, I do prefer alternative B. I am clearly in favor of aggressive action, and as I noted yesterday I am open to the purchase of longer-term Treasuries, but as President Lockhart just mentioned, in the interest of effective communications, I think we need to better explain why we decided to engage in the purchase of Treasury securities at this time. Brian gave us four reasons why we might want to consider that, and as you know, Mr. Chairman, in our statement in January we did say that we would do that in order to improve conditions in private credit markets, but I still think that may be a little too vague.

While the staff comments yesterday indicated a little less certainty that we get a larger bang for the buck if we purchase MBS versus Treasuries, I think we do have evidence that purchases of MBS have generated significant interest rate reductions just through their announcement effects. Also, the staff simulations highlighted yesterday the economic importance of stabilizing housing prices and the effects on household wealth. So, with the larger purchase of MBS along with some of the Treasury initiatives working in tandem, I think alternative B is a preferred way to go.

In terms of the statement language, the option of B′ or B, I slightly favor putting our actions in the front line or the first paragraph. There is some premium, I think, on clear and easily verifiable actions in these difficult and confusing times, although, after listening to Governor Kohn's comments about "what do we do when we don't take actions," I see that that might be a little confusing. But overall, B′ is my preference at this meeting.

CHAIRMAN BERNANKE. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Well, it seems like almost everything is fair game. So let me just make a few comments. I expressed my reservations about legacy TALF yesterday, so I won't reiterate those. I hope I was clear. With regard to purchasing assets, I do favor including purchases of Treasuries. I did back in December, I think, when we first talked about it. I continue to. So I would certainly go down that path.

That leads me to alternative A and the language, and I'm willing to go with the larger quantity that you proposed. All of the quantities are around $1 trillion—quite honestly, I'm not sure we're going to get a big difference in terms of market or macroeconomic effects at the end of the day, but I can certainly go with that. I would start with the language in alternative A. Just a couple of comments about that. I think I would be in favor of abbreviating the litany of the economic conditions. I don't know that it adds all that much at this point. If we say "severe contraction," I think that gets the message across. With regard to A versus A′, you could probably take care of Governor Kohn's concern at the next meeting by just saying, if we didn't do anything new, that the Committee reiterated its intention, and I think that would probably take care of it. But I don't see any great advantage, quite honestly, to reworking it, at least at this point. So I have a mild preference for A as written.

Having said that, I do think the Plosser-Bullard approach has merit, if we can get over some of these questions that have arisen, such as, "What will people in the market make of it?" and "Will people still want quantities?" and "Is there a way of integrating that approach with some quantities, if that would help clarify things?" I think those are all worth serious consideration. I don't have the answers today, so I'm not proposing that we adopt that. But I do think that perhaps there are at least the beginnings of a framework there that we ought to be thinking about at future meetings and that may serve to help our communication and help people in the markets understand better than they do right now where we intend to go. Thank you.

CHAIRMAN BERNANKE. Thank you. Governor Warsh.

MR. WARSH. Thank you, Mr. Chairman. Just a few points first. Given the policy uncertainty that we've all described that is out there in the world, it strikes me our preferences here in this room should be putting a greater emphasis on things that are clear and purposeful versus those that are big and bold and more. Clear, purposeful, big, bold, and more—if you could pull it all together in one fell swoop, that would be fine, but absent that, I would put the preference on clear and purposeful.

We've talked a lot about the makeup of our balance sheet. I would just reiterate a truism which I think still has merit—our biggest asset here is our credibility, which is a function of a lot of things, including clarity, success, and trying to speak as much as we practicably can with one voice; and that will obviously govern my vote in support of the consensus emerging from this discussion.

Having said that, I continue to have a strong preference for avoiding Treasuries for reasons I described yesterday and given that, since December, markets seem to see us as alternately having some affection and disaffection for purchasing Treasuries for reasons that have been hard to understand. I think we need to be prepared to address that issue if, as I expect, we include Treasury purchases in our statement today.

In terms of the size of these various elements, I think the only thing worse than buying Treasuries is to buy them in such a tepid way that we don't have any effect. I think if we're in, we're in. We're crossing the Rubicon. And I take very little comfort from the idea that we would be somehow testing this out just a bit. So I think, in effect, what we're really all saying, Mr. Chairman, is we are balance-sheet-constrained. There is only so much of these new assets, whether they be mortgage-backed or Treasuries, that we are comfortable with, given the risks to our flexibility. So I am troubled that the $300 billion will be perceived to be relatively light. But given people's preferences around here, I won't spend more time on that.

In terms of some of the language, I concur with the emerging consensus that we should delete some of the carnage in describing the economy on the grounds that it is well understood. I've got next to nothing to offer on style between prime and nonprime.

And on the Plosser–Bullard proposals, I think that it's a pretty interesting framework. I don't think it's ready for prime time, so I'd associate myself with what President Stern said, that it would be a useful way in which we could start to think in anticipation of our next meeting. But I don't think at this moment we can easily capture that in a way which goes back to first principles of being clear and precise. Thank you

CHAIRMAN BERNANKE. Thank you. Governor Duke.

MS. DUKE. Thank you, Mr. Chairman. I am actually in favor of the largest amount that we can all agree on. My objective, as I stated yesterday, is to have the biggest effect on housing that we possibly can. In terms of how we explain that, I do like the prime version, because it puts the action first. Having spent more of my time reading the statements than issuing them, it seems to me the first paragraph was always the action paragraph. And I think for a good time to come this will be our action. In addition, I think the easier we can make this to report, the better off we are. If you get reporters, particularly third- and fourth-level reporters, on a deadline and all they read is the first part and skim through the rest, they may not necessarily pick up the size of this action. So I have a pretty strong preference for the prime version. Also, while I find it interesting to put it on a percent-growth basis, we've already started down the path with the dollar amounts, and I think continuing with the way we've been communicating it already has some certainty and some simplicity. To me it feels like announcing a stock repurchase in the private sector. In that case, you size your stock repurchase in relation to the amount of outstanding shares that you have, and it's perceived that way and tends to impact your price that way.

Finally, on measuring effectiveness, I think the questions at this point would be: How big an effect does it have immediately on housing, on the stock market, and on things that create wealth, and how quickly do we see whether or not it has spillover effects?

The last piece is this sentence that says we "will be assessing whether a faster pace of asset purchases would be helpful in improving credit market conditions." I originally liked that, because it implied that we were willing to do even more. On thinking about it, though, there's something to be said for creating a little bit of fear in the housing markets that this is a window of opportunity to refinance or purchase. So if it doesn't look like rates may go down further if you wait, then I think that's got some real value. So I suppose ultimately I come down in favor of A plus′. [Laughter]

CHAIRMAN BERNANKE. I must find new nomenclature, I'm afraid. Governor Tarullo.

MR. TARULLO. Thank you, Mr. Chairman. Of the options on the table right now, I favor the combined option. Like Governor Duke, I would have been receptive to a higher number, and I guess President Evans would have been as well. The reason for that is twofold: (1) just because of my understanding of the magnitude of the challenge right now, and (2), as President Evans said, I think, it's really very important for us to be able to project a strong but adaptable approach to monetary policy, not just until the next meeting, but over the course of the next year. It seems to me that by rolling out a bigger, more ambitious headline number, if you will, but then saying we're going to implement that over an extended period of time, it gives us the opportunity at each of the next several Open Market Committee meetings to say "we are staying with an aggressive policy." In contrast to when you're working with the fed funds rate and you either have to stay where you are or reduce it another 25 or 50 basis points, here one could say that the Desk is continuing in an aggressive fashion to make purchases.

That leads into the issue of communication more generally, and like President Lockhart, I think the maximum amount of explanation of what we're doing and why we're doing it is important. There is and has been over the last several days a near obsession among markets about whether or not we are going to engage in large-scale purchases of Treasuries. I will predict that there's going to be a lot of speculation about why we're doing it. I will also predict that the explanation that it's "helping improve conditions in private credit markets" will not seem to most commentators to be a complete explanation. Thus, in an effort to respond to Governor Warsh's concerns—which I don't share to the extent of being unwilling to do securities purchases, but do think are important—I would hope that in the delicate but important arena of communications outside of the formal statement, we will be able to find a way quite quickly to clarify why we're doing this.

CHAIRMAN BERNANKE. I think one argument that's been made here is that we want to diversify in different markets.

MR. TARULLO. Right, exactly.

CHAIRMAN BERNANKE. Vice Chairman.

VICE CHAIRMAN DUDLEY. Thank you, Mr. Chairman. Obviously, there's a need for more stimulus, and it looks like less support is going to be coming from other quarters, so a substantial escalation is appropriate. Obviously, given what I said yesterday, I favor doing both. I would favor scaling up the Treasuries' size to $500 billion from $300 billion, per Governor Warsh's comment that, if you're going to do this, you might as well do it in size. I don't think the balance sheet constraint here is really meaningful, because we can sell or repo the Treasuries at a future date. So I just don't think that's a reason to make the distinction between $300 billion and $500 billion, and I think we'll have a more definitive test of how the market perceives this if we do $500 billion rather than $300 billion. At $300 billion, if we don't get much response, we're not going to know if it was because the market thought the scale was small. I think $500 billion is a more appropriate metric. I favor A over A′ just because I think it's simpler and it's more consistent with what we've been doing. And I agree that we should not be quite so scary in reminding people of how badly the economy is doing.

CHAIRMAN BERNANKE. Thank you. Let's try to put this all together. Most importantly, I think there's a pretty strong consensus for the combined package, the total of $1.15 trillion. I heard the point about doing even more in Treasuries. I guess I think that just crossing the Rubicon will have a significant announcement effect, because it will signal our willingness to do more if necessary in the future. I am a little concerned about misinterpretation of what we're doing, so I guess I would like to propose to stay where we are for the moment. We can always change it.

I very much appreciate the contribution from Presidents Plosser and Bullard. I don't think we're quite ready to go there, but I do think we can start communicating in that way and start trying to talk about percentages as we talk in speeches and other contexts. I think, in particular, since we want to front-load, it's hard to put it in percentage terms at the moment. And I think that to get the maximum effect in the short run that Governor Duke talked about, it would be better to have a headline number. But I think it's actually a very constructive point, and we should think about ways to move in that direction if we can.

So what I propose is to start from alternative B. I think it's reasonable to do either B or B′, but I didn't hear a huge amount of demand to go to B′. I heard the concerns about the first paragraph. What if we say that "the economy continues to contract," as some suggested? "Information received since the Federal Open Market Committee met in January indicates the economy continues to contract," period, and we'd drop "the outlook has worsened" as well. Then, if you like, we could drop, say, the sentence that starts with "Weaker sales prospects," but I think that is consistent with our previous style in trying to describe elements of the economy. Then I would note that we have a somewhat optimistic ending in this paragraph. So I don't think that it's going to be a huge shocker to anybody, and we do have to motivate why we're taking such a strong action. Comments?

MR. PLOSSER. Just a quick remark. I had suggested this notion of putting in market forces in terms of returning to stability. I didn't know whether you had forgotten that, but nobody ever commented on it.

CHAIRMAN BERNANKE. No. I was trying to keep life as simple as I can, but let's see here. Where is it?

MR. PLOSSER. "The Committee anticipates that market forces and policy actions will contribute to …"

CHAIRMAN BERNANKE. Are people okay with substituting that sentence?

MR. TARULLO. To what market forces are you referring?

MR. KOHN. I think what I heard around the table, Mr. Chairman, was not much confidence that market forces are moving in that direction and might even be moving in the other direction.

MR. PLOSSER. There's not much confidence that government forces are going to fix it either. So I'm not sure.

CHAIRMAN BERNANKE. President Lacker.

MR. LACKER. Surely, if the economy recovers, it's going to be a combination of policy actions and market forces. Surely that's the case.

CHAIRMAN BERNANKE. Well, all we're saying here is that these things will contribute. We're not saying that they're the only reason.

Let me go on. President Bullard.

MR. BULLARD. I just want to press on that a bit. It gives the impression that we're hanging on a thread as to what the Congress does or what we do or something like that. I don't think you want to leave that impression. Despite what the government does, you might recover faster or you might recover slower, and I think you should leave that thought in the minds of private citizens.

CHAIRMAN BERNANKE. Again, I think what we're saying here is that we anticipate that these things will contribute to an overall dynamic.

In B, in the third paragraph, we have the sentence about the "additional $750 billion of agency mortgage-backed securities, bringing its total purchases of these securities to $1.25 trillion this year, and to increase its purchases of agency debt this year by $100 billion to a total of $200 billion." So that's exactly as in B. Can we say something like, "the Desk has been instructed to…"?

MR. MADIGAN. I have a possible sentence, Mr. Chairman. "The timing of these purchases will be determined, in part, by conditions in primary and secondary mortgage markets."

CHAIRMAN BERNANKE. I don't think that's what people wanted to say, though.

VICE CHAIRMAN DUDLEY. I think it's fine for the Desk just to accelerate its purchases, and the market is going to see it.

CHAIRMAN BERNANKE. Is it okay to do it that way and not put it in the statement?

MS. MOSSER. That's all right. I had something very similar to Brian's. I actually stole the last sentence from alternative A.

MR. MADIGAN. Part of the issue, Mr. Chairman, is that we don't know exactly when the bulge in issuance is going to happen.

CHAIRMAN BERNANKE. Okay. I'll come to that one. Thank you. Let's back up a second. There is the question of "federal funds rate for some time." President Yellen suggested going to "for an extended period."

VICE CHAIRMAN DUDLEY. I think that's more accurate.

CHAIRMAN BERNANKE. Are we okay with that?

MR. PLOSSER. Can somebody explain to me how I am supposed to interpret that change?

CHAIRMAN BERNANKE. Because conditions have worsened, our expected liftoff time is probably longer than it was.

Then we have the sentence on the agency debt—that's okay. Then the next sentence about "prepared to purchase long-term Treasuries" is to be replaced by the sentence in alternative A: "Moreover, to help improve conditions in private credit markets, the Committee decided to purchase $300 billion of longer-term Treasury securities over the next six months."

VICE CHAIRMAN DUDLEY. Are we putting "up to's" in front of all of these numbers?

CHAIRMAN BERNANKE. Yes. Do we have "up to's" in the original announcements?

MR. MADIGAN. Yes, I believe so.

VICE CHAIRMAN DUDLEY. I think they are always "up to."

CHAIRMAN BERNANKE. All right. So let's make sure we have consistency with that. As Governor Duke and some others noted, there were questions about the last part. We should end the last sentence, "The Committee will continue to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of evolving financial market developments," period. Why don't we say "in light of evolving financial and economic developments" instead?

MR. PLOSSER. You just added "economic."

CHAIRMAN BERNANKE. But I'm dropping all the stuff about assessing our lending programs. At this point we're in an assessment mode. I think the only question remaining, Brian, is the "up to."

MR. MADIGAN. I think that may be actually difficult to work in here quickly in some cases just as a grammatical issue.

VICE CHAIRMAN DUDLEY. I think the one issue, though, is to make sure it's not quite so definitive that you are committing to purchase exactly that number.

CHAIRMAN BERNANKE. Why don't we put "up to" in front of each? So it's "up to an additional $750 billion."

MR. KOHN. "…agency debt this year by up to $100 billion."

CHAIRMAN BERNANKE. And then on Treasuries, "purchase up to $300 billion." Brian, are you ready to try to read?

MR. MADIGAN. I can try. [Laughter] From the top, "Information received since the Federal Open Market Committee met in January indicates that the economy continues to contract."

CHAIRMAN BERNANKE. The rest is the same, and the second paragraph is the same.

MR. MADIGAN. So the third paragraph: "In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and anticipates that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide greater support to mortgage lending and the housing markets, the Committee decided today to increase the size of the Federal Reserve's balance sheet further by purchasing up to an additional $750 billion of agency mortgage-backed securities, bringing its total purchases of these securities to up to $1.25 trillion this year, and to increase its purchases of agency debt this year by up to $100 billion to a total of up to $200 billion. Moreover, to help improve conditions in private credit markets, the Committee decided to purchase up to $300 billion of longer-term Treasury securities over the next six months" Then there is the TALF sentence. Then, "The Committee will continue to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of evolving financial and economic developments."

CHAIRMAN BERNANKE. Okay. We're ready then. President Lacker?

MR. LACKER. The directive?

CHAIRMAN BERNANKE. The directive, you're right. Do we have something, Trish?

MS. MOSSER. About either the pace of purchases or the size of the balance sheet?

CHAIRMAN BERNANKE. The directive is to be made consistent, and we said something along the lines that—

VICE CHAIRMAN DUDLEY. We have to put the Treasury sentence in the directive.

MR. LACKER. Can we use Directive A?

CHAIRMAN BERNANKE. We don't issue the directive at 2:15, do we?

MS. DANKER. But we vote on it.

CHAIRMAN BERNANKE. We'll put in the Treasury part. Then, can you include a sentence like, "The Desk will endeavor to ensure that the size of the portfolio rose"?

MS. MOSSER. Yes. We could say, "The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve's balance sheet to expand in the coming months." We're a little hesitant to pick the next intermeeting period because of the lumpiness of mortgages, honestly. But if that would suffice, we think that would work best from our perspective.

CHAIRMAN BERNANKE. "Expand significantly" even.

MR. LACKER. That works.

CHAIRMAN BERNANKE. Is that okay?

MR. LACKER. Thank you.

CHAIRMAN BERNANKE. Okay. Are we ready for a vote now? Debbie, would you call the roll, please?

MS. DANKER.

Chairman Bernanke	Yes
Vice Chairman Dudley	Yes
Governor Duke	Yes
President Evans	Yes
Governor Kohn	Yes
President Lacker	Yes
President Lockhart	Yes
Governor Tarullo	Yes
Governor Warsh	Yes
President Yellen	Yes

CHAIRMAN BERNANKE. Thank you very much. The next meeting is April 28 and 29. We'll adjourn. Lunch will be available, and over lunch, Laricke Blanchard will provide us with an update on congressional activities. Thank you.

END OF MEETING