I'm pleased to participate in this year's Brimmer Policy Forum. Governor Brimmer and I did not overlap at the Board, but I admired his work from my perch at the Federal Reserve Bank of Kansas City, where I began my career in the System. And my colleagues at the Federal Reserve and I have benefited greatly since then from his analytical approach to difficult public policy issues. This morning I thought it might be useful for me to review the course of monetary policy through the crisis and highlight a few issues for policy in the future.

I'd like to make two important clarifications before I get started: First, despite the title of the Forum, what I am about to discuss is not President Obama's monetary policy – it is the Federal Reserve's. Fortunately, the Administration has been careful to respect the independence of the Federal Reserve in the conduct of monetary policy. It recognizes that the Federal Reserve's insulation from short-term political pressures is essential for fostering achievement of its legislative objectives of stable prices and maximum employment over time. Second, the views you are about to hear are my own and not necessarily those of any other member of the Federal Open Market Committee (FOMC).

Monetary policy past

As a prelude to discussing where we are now and issues for the future, I thought it would be helpful to summarize the actions that we took over the past two years. In August 2007, we recognized that we were coping with a potentially serious disruption in financial markets that could feed back adversely on the economy and job creation. With liquidity in key funding markets drying up and some securitization markets closing down, lower policy interest rates alone were not going to be enough to keep financial conditions from tightening severely for households and businesses. In the end, we had to operate on multiple fronts to stabilize the financial markets and foster a rebound in the economy.

Expanding liquidity facilities. Our first actions were to ease the access of depository institutions to Federal Reserve liquidity. But, as the crisis worsened, it became apparent that these actions would be insufficient. Securities markets had come to play a prominent role in channelling credit in our economy, and severe disruptions outside the U.S. banking sector were threatening to reduce economic activity. To counter the financial shocks hitting the economy and support the flow of credit to households and businesses, we then needed to extend liquidity support to a range of nonbank institutions and to some financial markets. As we expanded the reach of our liquidity facilities, we generally followed the time-honoured precepts of central bank behavior in a crisis: Extend credit freely to solvent institutions at a penalty rate against adequate collateral. By making liquidity available more broadly, we were trying to break the vicious spiral of uncertainty and fear feeding back on asset values and credit availability, and from there to the economy. We also found we needed to innovate by making liquidity available through auctions as well as standing facilities to overcome firms' reluctance to borrow from the Federal Reserve out of concern that the borrowing could be inferred by market participants and viewed as an indication of financial weakness.

Lowering policy interest rates. In view of the likelihood that financial developments would lead to a weakening of aggregate demand, we began to lower the federal funds rate in
September 2007, well before any hard evidence had become available regarding the magnitude of the restraint that it might impose on economic activity. As it became increasingly evident over the course of 2008 that the financial disruptions were sending the U.S. economy into recession, we picked up the pace of reductions in our federal funds rate target. Importantly, our ability to move aggressively was enhanced by an environment of already low inflation and stable inflation expectations.

Buying longer-term assets. To ease financial conditions further even after our policy interest rates had approached zero, we needed to operate directly on longer-term segments of the financial markets. Even though various types of debt securities are ordinarily quite substitutable, our purchases of agency-guaranteed mortgage-backed securities (MBS), agency debt, and Treasury securities evidently were successful in reducing long-term interest rates, partly because during the crisis, private-sector participants had a very marked preference for short-term assets.

Interest rate guidance. In this highly unusual situation, and with the normal response of monetary policy interest rates constrained by the zero lower bound, we consider it especially important that we convey as clearly as possible our policy intentions to market participants as they formulate their own expectations for the future path of interest rates. To help in this regard, we have noted in the statements we have released at the conclusion of each FOMC meeting our expectation that exceptionally low rates will likely be warranted for an extended period.

Inflation forecasts and objectives. Keeping inflation expectations anchored is always important but especially so in current circumstances, given the potential effects of the unprecedented economic developments and policy actions of the past two years on households’ and businesses’ views of the price outlook. To provide more information to the public about our own expectations and objectives, we have extended the horizon of the published projections of FOMC participants to five years and have supplemented these projections by reporting the long-term inflation rates Committee participants view as most consistent with satisfying our dual mandate.

Stabilizing systemically important institutions. In the absence of any other governmental agency having the authority to fill the role, we have lent to stabilize several systemically important institutions, any one of which—had it failed—would have posed a serious threat to the financial system and the economy. These actions, while necessary, were not well suited for a central bank, and we have urged the Congress to enact other means of safeguarding financial stability in such circumstances while imposing costs on shareholders, management, and, whenever possible, creditors.

Monetary policy present

The broad suite of monetary, financial, and fiscal policies that have been applied, along with the natural resilience of the economy, has led to a marked improvement in financial markets and the beginnings of a recovery in economic activity.

Financial markets are performing much better now than they were in early 2009. Our liquidity facilities, the reduction of uncertainty about the capital and liquidity needs of the largest banks after the results of our capital assessment were published in May, and the emerging stabilization of the housing and other key sectors of the economy have helped a number of financial markets resume more normal functioning. As a consequence, borrowing from the Federal Reserve has dropped dramatically. In addition, many securitization markets appear

---

1 For more on the results of the capital assessment, see Board of Governors of the Federal Reserve System (2009), The Supervisory Capital Assessment Program: Overview of Result(Washington: Board of Governors, May 7).
to be functioning more normally, partly reflecting the support provided by the Term Asset-Backed Securities Loan Facility that we implemented in early 2009 with the support of the Treasury Department. As we affirmed at the December FOMC meeting, the Federal Reserve is in the process of winding down and closing most of our extraordinary liquidity windows.

Our announcements of purchases of agency MBS, agency debt, and Treasury securities helped to lower long-term interest rates and increase the availability of mortgages to households and bond financing to businesses. In addition, our near-zero policy rate and the improving economic outlook have induced shifts by private investors into longer-term and riskier assets, helping to reverse a portion of the previous spike in spreads that occurred as the economy and financial markets deteriorated. With markets improving and the economy expanding, the FOMC has also indicated that it is tapering down its purchases of Treasury, MBS, and agency securities.

But the cost of credit remains relatively high and its availability relatively limited for many borrowers. Although many long-term interest rates are fairly low, spreads in bond markets are somewhat elevated – not surprising, perhaps, as many borrowers are still under stress with the unemployment rate quite high and utilization of the capital stock still very low. Some securitization markets continue to be effectively closed or severely impaired, including those for larger home mortgages and commercial real estate loans. Under these circumstances, some borrowers will be more dependent than in the past on banks for credit, but banks are still reluctant and very cautious lenders. Banks have been reducing their book of loans for about a year; in part, this drop reflects weaker demand as businesses have cut back on inventories and households have been rebuilding their balance sheets by increasing saving. But the weakness in bank lending also results from cutbacks in supply. Our surveys show that through late 2009, banks continued to tighten terms and standards for lending and to raise the rates they charge relative to benchmark rates. I expect bank credit to turn around only slowly as banks rebuild capital and become less uncertain about economic prospects.

Lingering credit constraints are a key reason why I expect the strengthening in economic activity to be gradual and the drop in the unemployment rate to be slow. Even as the impetus from fiscal policy and the inventory cycle wanes later in 2010, however, private final demand should be bolstered by further improvements in securities markets and the gradual pickup in credit availability from banks. In addition, spending on houses, consumer durables, and business capital equipment should rebound from what appear to be exceptionally low levels. We have already seen some hints of this increase in private demand in recent months. But, understandably, households and businesses and bank lenders remain very cautious, and the odds are that the pickup in spending will not be very sharp.

In an environment of considerable persisting slack in labor and product markets, and with productivity having increased substantially in recent quarters, cost and price inflation should remain quite subdued. In the short run, headline inflation will be driven importantly by movements in energy and food prices; judging from the structure of futures prices, markets are not expecting a further sharp rise in those prices, and thus headline inflation should retreat toward core inflation. Inflation outside of the food and energy sectors has been declining slowly, held up by relatively stable inflation expectations. Some further slowing is possible if the economic rebound is as gradual as I think it is likely to be. As I have already noted, keeping inflation expectations anchored will be critical for achieving our objectives for prices and output.

The FOMC has recently reiterated its expectation that the considerable remaining slack in labor and product markets and subdued trends in inflation and inflation expectations are likely to warrant exceptionally low levels of the federal funds rate for an extended period.
Monetary policy future

The Federal Reserve will face a number of challenges in the conduct of monetary policy in the period ahead. I will discuss two of them: further exit from our extraordinary measures, including the large volume of reserves, our outsized portfolio of MBS, agency, and Treasury securities, and our near-zero policy interest rate; and evaluating any lessons from the recent experience for the conduct of policy – in particular, the potential role of financial stability and asset prices in monetary policy formulation.

Exit. I’m not going to discuss the technical aspects of an exit from our extraordinary measures; the Federal Reserve has kept the public apprised of the development of our exit tools, and the appropriate use and sequencing of these tools is under active discussion by the FOMC. But I do want to make some general strategic points.

First, we have no shortage of tools for firming the stance of policy, and we will be able to unwind our actions when and as appropriate. Because we can now pay interest on excess reserves, we can raise short-term interest rates even with an extraordinarily large volume of reserves in the banking system. Increasing the rate we offer to banks on deposits at the Federal Reserve will put upward pressure on all short-term interest rates. In addition, we are developing and testing techniques for draining large volumes of reserves through reverse repurchase agreements and through term deposits at the Federal Reserve. And we can sell portions of our holdings of MBS, agency debt, and Treasury securities if we determine that doing so is an appropriate approach to tightening financial conditions when the time comes.

Second, the fiscal situation will not impede timely tightening. The trajectory of the federal budget is a serious economic issue that must be addressed to promote sustained and balanced economic growth. But a large and growing federal deficit will not stop the Federal Reserve from exiting from current policies when that’s needed to keep prices stable and the economy on a path to sustained high employment. The alternative of letting inflation rise would be inconsistent with our mandate and would only cause greater volatility, uncertainty, and inefficiencies that would reduce the growth of our economy over time. Higher interest rates could complicate an already difficult fiscal trajectory, and this possibility further underscores the critical importance of maintaining Federal Reserve independence from short-term political pressures.

Third, because monetary policy typically acts with long lags on the economy and price level, the choice of when and how to exit will depend on forecasts. We will need to begin withdrawing extraordinary monetary stimulus well before the economy returns to high levels of resource utilization. The FOMC has been clear that its expectations for the stance of monetary policy depend on economic conditions, including resource utilization, inflation, and inflation expectations. Accordingly, the judgment as to when to begin initiating steps to withdraw stimulus will depend on the outlook for these variables.

Finally, it is well to remember that we are still in uncharted waters. We do not have any recent experience with financial disruptions of the breadth, persistence, and consequences of those that we have experienced over the past several years. And we have no experience with most of the sorts of actions the Federal Reserve has taken to counter the shock. The calibration of our exit from these policies is complicated by a paucity of evidence on how unconventional policies work. We will need to be flexible and adjust as we gain experience.

Financial stability and asset prices. The past few years have illustrated two lessons about the relationship between macroeconomic stability and financial stability. First, macroeconomic stability doesn’t guarantee financial stability; indeed, in some circumstances, macroeconomic stability may foster financial instability by lulling people into complacency about risks. And second, some shocks to the financial system are so substantial, especially when they weaken a large number of intermediaries, that decreases in aggregate demand can be large, long lasting, and not quickly or easily remedied by conventional monetary policy.
Given the heavy costs that have resulted from the financial crisis, the question naturally arises as to whether the circumstances that caused the crisis could have been avoided. Among other crucial policy issues, we now need to reexamine, with open minds, whether conventional monetary policy should be used in the future to address developing financial imbalances as well as the traditional medium-term macroeconomic goals of full employment and price stability. The key question is whether we are likely to know enough about asset price misalignments and the likely effects of policy adjustments to give us the confidence to deliberately tack away for a time from exclusive pursuit of fostering aggregate price stability and high employment. Obviously preventing situations like the current one would be very beneficial. But against this important objective we need to balance the potential costs and uncertainties associated with using monetary policy for that purpose, especially in light of the difficulty in judging the appropriateness of asset valuations.

One type of cost arises because monetary policy is a blunt instrument. Increases in interest rates damp activity across a wide variety of sectors, many of which may not be experiencing speculative activity. Moreover, monetary policy generally operates with one instrument — a short-term interest rate — and using it to damp asset price movements implies more medium-term variability in output and inflation around their objectives. Among other things, inflation expectations could become less well anchored, diminishing the ability of the central bank to counter economic fluctuations. In the current situation, with output expected to be well below its potential for some time and inflation likely to be under the 2 percent level that many FOMC participants see as desirable over the long run, tightening policy to head off a perceived threat of asset price misalignment could be expensive in terms of medium-term economic stability.

Furthermore, small policy adjustments may not be very effective in reining in speculative excesses. Our experience in 1999 and 2005 was that even substantial increases in interest rates did not seem to have an effect on dot.com stock speculation in the first instance, and housing price increases in the second. And larger adjustments would incur greater incremental costs. Policy adjustments need to damp speculation; if higher rates just weaken output and inflation without damping speculation, the economy could be even more vulnerable when the speculative bubble bursts. We do not have good theories or empirical evidence to guide policymakers in their efforts to use short-term interest rates to limit financial speculation.

For all these reasons, my strong preference would be to use regulation and supervision to strengthen the financial system and lean against developing problems. Given our current state of knowledge, monetary policy would be used only if imbalances were building and regulatory policies were either unavailable or had been shown to be ineffective. But, of course, we should all be working to improve our state of knowledge, so as to better understand economic and financial behavior and to further expand the range of policy tools that can be employed to enhance macroeconomic performance. That objective is one that Governor Brimmer has worked hard to promote.