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**The Outlook for 2009:
Economic Turmoil and Policy Responses¹**

Good afternoon, and thank you for inviting me to speak to you today. I am very pleased that one of my first speeches of the year is to the Financial Women's Association. Those of you who work in the financial sector are keenly aware of the problems we now face in the financial markets and the economy, and I very much welcome your questions and insights.

As you all know, sound, well-functioning financial markets and institutions are essential to a sound, well-functioning economy. They provide the credit that firms require to finance inventory, hire workers, and invest in new capital equipment and that households need to buy houses and cars and to send their kids to college.

Today, financial markets have, in many cases, broken down and the ramifications for the economy have been severe due to the essential interconnections between the two: Financial distress precipitated a credit crunch, sending the economy into recession. And weakness in the economy has intensified financial distress, further diminishing access to credit. These ongoing, negative dynamics create severe downside economic risks, and the perception of intense uncertainty about the future has prompted a loss in confidence, leaving households and firms wary about spending. For example, consumers are pulling back on purchases, especially on durable goods, to save more, and businesses are

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cancelling capital investment plans and laying off workers to preserve cash. Such actions are sensible on an individual basis, but they intensify economic distress for the economy as a whole.

I consider it imperative for policymakers to act boldly to restore confidence and improve the functioning of financial markets in order to get the economy back on its feet. The Federal Reserve has already implemented aggressive, creative, and substantial policies, and more can be done. In addition, there is now a consensus that the economy needs strong fiscal action, and prospects are good that a federal stimulus program will be forthcoming. Finally, I am heartened that policymakers around the world are responding forcefully and cooperatively to address the financial and economic crisis as it has spread throughout the global economy. My goal today is to give you my perspective on the financial and economic turmoil and to discuss and explain the policy responses and their rationales. As always, my comments represent my own views and not necessarily those of my colleagues in the Federal Reserve System.

Economic conditions

I will begin with a review of current economic conditions. Unfortunately, there is not much good news to report. Recent data indicate that, over a year into the current recession, the U.S. economy is still contracting sharply. For example, the latest Blue Chip consensus estimates that output declined at an annual rate of over 5 percent last quarter and is likely to continue contracting, at a pace exceeding 3 percent, in the current quarter.

Economic weakness is evident in every sector of the economy. After declining slightly in the third quarter, real personal consumption expenditures appear to have fallen more sharply in the fourth. Such retrenchment in consumer spending is understandable, given the truly tough conditions that households face, but especially troubling because this sector represents over 70 percent of GDP. With respect to jobs, employment has declined for twelve months in a row, and the unemployment rate now stands at 7¼ percent up from 5 percent just a year ago. With respect to wealth, the combined impact of falling equity and house prices has been staggering. Household wealth has declined by an estimated \$10 trillion. With respect to consumer credit, it is both costlier and harder to get. Not surprisingly, consumer confidence is at a 30-year low and the personal saving rate is on the rise, as people try to rebuild their wealth and provide a cushion against the possibility of job loss. The recent plunge in vehicle sales, in spite of lower gas prices and huge price incentives, reflects this lack of confidence as well as the difficulties people are having in getting auto loans.

Business spending is also feeling the crunch, as firms face weak demand for their products, a higher cost of capital, and restricted credit. In particular, many companies, especially those with lower credit ratings, are experiencing difficulty borrowing in the commercial paper market, an important source of short-term funding. Bank lines of credit reportedly are more difficult to negotiate, trade credit is being restricted, and many firms have become cautious in managing liquidity and in committing to capital spending projects. Some companies are drawing down existing credit lines to have cash on hand in case these lines are capped by their bank. This caution has spread to venture capital spending as well, where activity has dropped significantly; in consequence, information

technology and biotech companies in Silicon Valley and elsewhere are scaling back on business expansion plans.

Nonresidential construction, surprisingly enough, has continued to show some growth up to this point, but this is not likely to last much longer. I'm hearing talk about substantial cutbacks on new projects and planned capital improvements on existing buildings for two all-too-familiar reasons—demand is falling as the economy weakens and financing is hard to get. In particular, the market for commercial mortgage-backed securities, a mainstay for financing large projects, has all but dried up. Banks and other traditional lenders have also become less willing to extend funding.

Although residential investment accounts for under 5 percent of overall economic activity, the decline in this sector over the past three years has been big enough to create a major drag on growth. Housing starts have plummeted, falling to nearly one-half of their year-ago level, and it is hard to see when they will bottom out, since inventories of unsold new and existing homes remain at high levels relative to sales. Indeed, the possibility of ongoing contraction in this sector is intensified by the economic downturn, the loss in jobs, and the reduced availability of mortgage credit. At this point, the market for private-label mortgage-backed securities is essentially closed for business, leaving the government agencies, especially Fannie Mae and Freddie Mac, as the main source of funding or backing for conventional conforming mortgages. One piece of good news is that interest rates on conforming mortgages have come down recently in response to a new Federal Reserve program to purchase agency debt and significant quantities of agency-guaranteed mortgage-backed securities.

The ongoing decline in house prices is a source of particular concern not only because of its impact on consumer spending, but also because it contributes importantly to delinquencies and foreclosures on subprime and other mortgages. Foreclosures are extremely painful for homeowners and create negative spillovers for neighbors and afflicted communities. As you may know, some of the earliest and sharpest price declines nationwide occurred in parts of California and other western states, such as Arizona and Nevada. Foreclosure rates in these states are well above their historic highs dating back at least to the late 1970s, and home prices in the largest metro areas are down by as much as 35 to 40 percent from their 2006 peak. Unfortunately, futures contracts for house prices suggest that further declines are likely this year and next.

Many state and local governments have been dragged into the financial mess. The downturns in the housing markets and the economy have bitten into tax collections at the same time that the financial market turmoil has made it harder to issue bonds. These problems are particularly acute in California. Despite a successful bond issuance in October, ongoing erosion in revenues has raised the possibility that the state will run out of money in February. The latest projection is for a deficit of about \$40 billion that will accumulate over the current and next fiscal year. This is a huge shortfall relative to annual revenue of \$100 billion, and the actions needed to overcome it are only likely to add to the recession in the state.

Moving from the local to the global, the situation is not much brighter. The strong foreign demand for our exports that gave a major boost to the U.S. economy through the third quarter of last year is not likely to continue. Economic growth in the rest of the world, particularly in Europe and Japan, has weakened sharply for a number of

reasons, including spillovers from the U.S. recession and from the financial meltdown that now has spread globally. In addition, the dollar has appreciated against the euro and British pound over the past year, offsetting a portion of the depreciation that was supporting U.S. exports. For these reasons, it now looks likely that the data will show worldwide recession in late 2008 and early 2009, with a more severe and long-lasting contraction in many industrial countries.

To conclude my review of current conditions, let me turn to inflation. Not so long ago we were worried about rising inflation in the wake of soaring commodity prices. Those days are gone. Weaker economic activity around the world has reduced the demand for commodities, pushing their prices, and inflationary pressures, down substantially. At the same time, rising unemployment and unused industrial capacity are also putting downward pressure on inflation. In fact, with slack in labor and product markets likely to build significantly over the next couple of years, it seems likely that inflation will move, for a time, below levels that are consistent with price stability.

Conventional Federal Reserve policies

By now, I hope my remarks have made it clear that the interaction between the financial shock and the recession, as well as the associated crisis in confidence, present extraordinary challenges for policymakers—challenges that certainly are the most significant and complex since the deep recession in 1980-82, and perhaps since the Great Depression. An important lesson from both theory and history is that such circumstances call for prompt and aggressive policy action. I believe we have heeded that lesson, responding vigorously. The Federal Open Market Committee (FOMC) has cut its federal

funds rate target by roughly 5 full percentage points, lowering it essentially to its “zero bound,” by establishing a target range of 0 to ¼ percent at its meeting last December.

Federal Reserve communications policy

Obviously, with the funds rate at the zero bound, the Committee cannot push it any lower to stimulate the economy. But that does not mean that the Committee is out of options. An extensive body of literature suggests that communications can play a helpful role in addressing the zero-bound constraint. In particular, by offering guidance about the likely course of future short-term interest rates, conditional on the Committee’s economic forecast, the Fed may be able to influence longer-term rates and asset prices. The Fed employed such an approach between 2003 and 2005, and has taken an important step along the same path in its December announcement by stating that “exceptionally low levels of the federal funds rate” are likely to be warranted “for some time” due to “weak economic conditions.”

Communication also can be important in the Fed’s efforts to anchor long-term inflation expectations. As I mentioned at the outset, the odds are high that over the next few years, inflation will decline below desirable levels. It is especially important in such circumstances for the Fed to emphasize its commitment to returning inflation over time to the higher levels that are most appropriate to the attainment of its longer-term objectives. A decline in inflationary expectations when economic conditions are weak is pernicious, especially so when the federal funds rate has reached the zero bound, because any downdrift in inflation expectations leads to an updrift in real interest rates and a tightening of financial conditions.

Over the past few years, the FOMC has taken important incremental steps toward making its longer-term inflation goals more explicit. For example, we are now publishing FOMC members' inflation forecasts for the next three years under the assumption of "appropriate monetary policy," and the publication of such forecasts has helped shape public understanding concerning the range of inflation outcomes that FOMC members regard as desirable in the longer term. Looking forward, there could be scope for the Committee to improve the clarity of these communications. I am optimistic that, by clearly communicating the Fed's commitment to low and stable inflation and by backing that commitment up with determined policy actions should the need arise, any deflationary pressures caused by the weak economy can be contained.

The Federal Reserve's balance sheet policies

Beyond interest rate policy, the Fed has other tools at its disposal to improve the functioning of financial markets and to lower longer-term interest rates to support private spending. Indeed, the Fed has done a lot already through "nonconventional" programs that use its balance sheet. These programs serve two main purposes: first, to provide a reliable source of liquidity to financial institutions and markets and second, to augment the flow of credit to the private sector.

The provision of liquidity is important to prevent "runs" that create systemic risks to the economy as a whole. The Federal Reserve has long fulfilled this "lender of last resort" function for commercial banks, which have been protected both with access to the Fed's discount window and deposit insurance. In the current crisis, however, systemic risk has been a concern for some financial institutions outside the commercial banking

sector. I am referring particularly to institutions comprising the so-called “shadow banking sector.” This sector includes investment banks that commonly finance their securities portfolios through very short-term repurchase agreements with money market mutual funds and Structured Investment Vehicles (SIVs) and conduits—entities that issue short-term asset-backed commercial paper to fund holdings of higher-yielding asset-backed securities. Entities like these subject the economy to systemic risk, because, like banks, they are subject to runs. Indeed, any institution, however sound, that borrows very short to hold a portfolio of longer-term, illiquid assets may be unable to satisfy the demands of their lenders for repayment when they flee en masse.

The Fed’s balance sheet programs are also intended to augment the flow of credit to households and firms, thereby offsetting, at least in part, the reduced flow of credit from financial institutions and markets. One reason that the availability of credit has diminished is because the markets for most asset-backed securities, with the exception of agency-guaranteed mortgage-backed securities, are highly impaired so that issuance has diminished to a trickle. A second cause of the credit crunch is that financial institutions, especially those in the shadow banking sector are scaling back their balance sheets. These institutions suffer from a shortage of capital—or, to put it another way, are too highly leveraged. Unfortunately, the commercial banking sector is unable to pick up all of the slack, in spite of the recent capital injections they have received, because banks are afflicted with losses from write-downs of impaired assets and mounting credit losses, particularly on real estate loans.

I’d like to next sketch out some of the programs that the Fed has already put in place to provide liquidity and increase the flow of credit and address some frequently

asked questions about the Fed's unconventional policies: Are they working? What is the scope for expanding these policies? How does the Fed's approach compare to the quantitative easing policy implemented by the Bank of Japan between 2001 and 2006?

To fulfill our role in providing liquidity to financial institutions and markets, we have crossed traditional boundaries by extending the maturity of the loans, the range of acceptable collateral, and the range of eligible borrowing institutions. We introduced a new auction system—called the Term Auction Facility (TAF)—to distribute discount window loans more effectively, and then greatly expanded the size and term of the auctions to address a persistent shortage of term funding in the money markets. We have also supported the provision of dollar liquidity beyond our own shores through a vast expansion of our network of swap lines with foreign central banks.

We realized early on that stabilizing the financial system would require lending not only to institutions in the traditional banking sector but also to those in the shadow banking sector. Doing so required invoking section 13(3) of the Federal Reserve Act, which authorizes lending to nonbanks only in “unusual and exigent circumstances.” For example, it was used to facilitate the acquisition of Bear Stearns and to stabilize AIG and Citigroup—three systemically important financial firms. This authority was also used to establish a discount window facility for primary dealers—the Primary Dealer Credit Facility (PDCF)—and a new facility to enhance the ability of primary dealers to finance their securities inventories through the market for repurchase agreements—the Term Securities Lending Facility (TSLF).

The collapse of Lehman and the near-collapse of AIG this past fall triggered severe disruptions in short-term money markets, as investors in prime money market mutual

funds fled to the safety of the shortest-term Treasury securities to the point that the three-month T-bill rate hovered near zero. These disruptions also triggered dysfunction in the commercial paper market, a large and important source of short-term financing for both financial and nonfinancial corporations. In response, the Fed set up new facilities to provide liquidity to money market funds and the commercial paper market.

In my judgment, the suite of facilities that the Fed has created to improve money market conditions is working. Conditions are still abnormal, but money market functioning has improved markedly relative to the dark days of last September and October. For example, term Libor rates have declined along with the spreads of these rates over the federal funds rate. Since term Libor rates are a benchmark for many adjustable-rate loans, including mortgages, the benefits of these reductions are rippling throughout the private sector. For highly rated commercial paper eligible for the Commercial Paper Funding Facility (CPFF), spreads have also narrowed substantially.

To improve the flow of credit to the private sector, the Federal Reserve announced several new programs in November. In this arena there remains considerable scope for further action. In particular, in support of the housing sector, the Fed announced and commenced a \$600 billion program to purchase agency debt and agency-insured mortgage-backed securities. Yields on mortgage-backed securities and 30-year fixed-rate mortgages fell substantially right after the program was announced, and these rates fell again when the first purchases were made earlier this month. Moreover, there has been an upsurge in refinancing activity in recent weeks. The FOMC could also expand its purchases of longer-term Treasury debt, which might lower government borrowing rates and spill over into private borrowing rates more broadly.

The Fed has developed another very promising program to help restore functioning in other impaired financial markets. It is called the Term Asset-Backed Securities Loan Facility (TALF), and it will support the issuance of securities collateralized by auto, student, credit card, and SBA, or Small Business Administration loans—sectors where the issuance of new securities has slowed to a trickle. The high borrowing spreads on such securities, even when the underlying loans are government-guaranteed—as in the case of SBA and many student loans—suggest not only heightened credit risk but also an impairment of market liquidity which the facilities can address. By improving the functioning of markets for securitized assets, the Fed has the potential to boost private-sector credit flows in support of the economy. This new facility is a joint Fed-Treasury initiative; cooperation with the Treasury is necessary because the program entails some risk of loss and, under the Federal Reserve Act, all Fed lending must be appropriately secured.

The approach employed by the TALF has the potential to be expanded substantially, with higher lending volumes and additional asset classes, such as commercial and non-agency residential mortgage-backed securities. As I noted, these markets have all but dried up since the credit crisis began, and the shortage of credit in these critical sectors has made private borrowing costs exceptionally high.

The use of the Fed's balance sheet to stimulate the economy might seem quite a lot like the “quantitative easing” policy pursued by the Bank of Japan in the early 2000s, when it was at the zero bound. However, to my mind, the differences outweigh the similarities. The main similarity is that the Fed, like the Bank of Japan, has increased the total quantity of bank reserves well above the minimum level required to push overnight

interbank lending rates—in our case, the federal funds rate—to the vicinity of the zero bound. The creation of such a large volume of reserves, in the Fed’s case, results from the enormous expansion in discount window lending, foreign exchange swaps, and asset purchases through our various liquidity facilities. In the Bank of Japan’s case, the expansion in reserves resulted from the deliberate adoption of an explicit numerical target for them. The concept underlying the Bank of Japan’s intervention was that banks might be encouraged to lend by replacing their holdings of short-term government securities with excess cash. However, near the zero bound, short-term government securities and cash are almost perfect substitutes, so exchanging one for the other should have little effect on banks’ desire to lend. And the Japanese experience suggests that simply expanding bank reserves—even by a very large amount—had little effect on bank lending or on the economy more broadly.

The consequence of all of the Fed’s balance sheet initiatives is that our balance sheet has ballooned from about \$900 billion at the beginning of 2008 to more than \$2 trillion currently—and is rising. However, the impact of the totality of Fed programs should not be judged by the overall size of the Fed’s balance sheet. Instead, that size will be the result of decisions concerning the appropriate scale of each particular program and the extent to which the various programs and facilities are actually used by market participants. The take-up rates on these programs and facilities are likely to fluctuate over time as market conditions change. For example, early in a new Fed lending program, its impact on economic activity might rise with the associated expansion of the Fed’s balance sheet. Later on, if the program helps to improve the functioning of the private market, success could be associated with the contraction of the Fed’s balance

sheet as the Fed exits from the market, leaving the determination of credit flows to private participants. Furthermore, the mere availability of backup liquidity through a facility may improve market functioning, even if the volume of borrowing is low.

Fiscal policy

I'd like to conclude by stepping a bit outside the scope of monetary policy to say a few words about the role of fiscal policy in the current crisis. In ordinary circumstances, there are good reasons why monetary, rather than fiscal, policy should be used for stabilization purposes. But we are in extraordinary circumstances, and the case for substantial fiscal stimulus over the next few years is very strong. First, as I have indicated, with the economy contracting significantly, it is time to “pull out all the stops”—that is, to deploy both monetary and fiscal policy—to avoid a deep and lingering recession. Second, the case for fiscal stimulus is strengthened by the fact that monetary policy has already moved its short-term interest rate essentially to zero.

In fact, a substantial fiscal stimulus package is now under consideration by the incoming Obama administration and the Congress, and there will be—and should be—vigorous debate about the form it should take and about the likely effectiveness of particular fiscal strategies. While engaging in that debate is not my job today, I would note that fiscal policy can play two logically distinct roles in the present crisis. The first is to support aggregate demand. Of course, we don't know the full details of the bill that will be passed, but the proposed legislation would provide for considerable stimulus—a combination of tax cuts and spending increases perhaps totaling nearly \$800 billion.

The second role, which is important in the current crisis, is to address the maladies that now afflict the financial sector. Indeed, fiscal resources have already been deployed to bolster the capital of the banking system, to stabilize systemically important institutions, and to support programs designed to assist homeowners and mitigate foreclosure. Fiscal policy can play a further supportive role in unclogging credit market flows. I have already mentioned one example: the TALF, which is a joint program between the Fed and the Treasury that uses funds from the Troubled Assets Relief Program (TARP) and is designed to improve the flow of credit to households and businesses.

The resolution of financial sector difficulties, and the stimulus to aggregate demand in our economy, are essential for a return to sustained growth, and I am heartened that the Fed and other policymakers in the U.S. and around the world are taking bold steps.

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