These are economically trying times. In my remarks, I would like to discuss the factors I see affecting the outlook for the U.S. economy and monetary policy. As always, I speak only for myself, and not for my Federal Reserve System colleagues.¹

Financial market conditions loom large in any discussion of the economy these days. The heart of the problem, of course, is the home mortgages made from late 2005 through early 2007, near the end of the long U.S. housing boom that began in 1995. Since the peak in activity in 2005, housing investment has fallen by more than 40 percent. Average housing prices, as measured by the FHFA repeat sales index, have fallen 6 ½ percent since their peak in April 2007. Some markets have experienced more dramatic declines; the home price index for California fell 18 percent, for example. The resulting erosion in home equity for many borrowers has meant that mortgages made near the peak of the boom, especially the subprime and non-traditional categories, are experiencing much larger losses than expected.

It will take years of research to untangle the quantitative contribution of various causal factors to the rise in subprime mortgage lending and the increase in subprime losses, so I won’t attempt such an analysis here. Let me simply offer a list of plausible suspects. One candidate is the wave of technological innovation in retail credit delivery, which contributed to an expansion of consumer credit, including unsecured and mortgage credit. As in any industry in the midst of innovation, this expansion may have involved overshooting and retrenchment.

A second suspect is the regulatory and supervisory framework surrounding U.S. housing finance, which may have been insufficiently prepared for the possibility of a swing in housing demand of the magnitude and geographic extent that we have seen. Private sector incentives to foresee and protect against such shocks were to some extent dampened by the presence of the federal financial safety net, and perhaps by official policies aimed at increasing homeownership. In addition, the unscrupulous and fraudulent practices of some mortgage brokers outside of the banking sector may have contributed to the problem.

I would also cite relatively low interest rates after the recession earlier this decade, especially in 2003 and 2004. Some economists have argued, with the benefit of hindsight, that tighter monetary policy during that period would have led to better outcomes by preventing core inflation from rising, thus limiting the housing boom and mitigating the
subsequent bust. While I find this view plausible, again, further research will be required to substantiate this hypothesis.

That’s all prologue, however, to the turmoil that has plagued financial markets since the middle of last year, when the potential scale of the home mortgage problem became more widely appreciated. The turmoil intensified in mid-September this year, and volatility has been elevated since. Financial market participants have faced three major categories of uncertainty. The first concerns the aggregate amount of losses on mortgage lending. For mortgages made in 2006 and early 2007 – the vintages in which losses are concentrated – significant uncertainty still remains regarding total losses.

Second, financial market participants face uncertainty about where the losses will turn up. Mortgage risks were split up and spread widely, both within the United States and in Europe, through securitization and use of the insurance capabilities provided by credit derivative contracts. As a result, financial market participants are understandably apprehensive about whether a particular counterparty’s mortgage-related losses will erode their capital buffer enough to threaten their viability. This has led to elevated risk premia in interbank credit markets for institutions with at least some presumed mortgage-related exposure.

Third, market participants have at times faced uncertainty about prospective public sector intervention. The disparate responses to potential failures at several high-profile organizations this year may have made it difficult for market participants to forecast whether and in what form official support would be forthcoming for a given counterparty. Shifts in expectations regarding official intervention may have added volatility to financial asset markets that already were roiled by an increasingly uncertain growth outlook.

The striking feature of central bank lending during the recent turmoil is the extent to which it has extended well beyond the boundaries that previously were understood to constrain such lending, both in the range of institutions and the contractual terms on which credit has been provided. Intervention has been driven by a desire to prevent damaging disruptions to financial markets, and thus reduce the overall costs of the turmoil. While this objective is clearly understandable, central bank lending can create the expectation that similar support will be forthcoming when market disruptions occur in the future. Such expectations can themselves be very costly, because they can distort the incentives faced by, and as a result, the choices made by private-sector participants.

The critical policy question of our time is where to establish the boundaries around the public-sector safety net provided to financial market participants, now that the old boundaries are gone. In doing so, the prime directive should be that the extent of regulatory and supervisory oversight should be commensurate with the extent of access to central bank credit in order to contain moral hazard effectively. The dramatic recent expansion in Federal Reserve lending, and government support more broadly, has extended public sector support beyond existing supervisory reach, and thus could destabilize the financial system, if no corrective action is taken. Restoring consistency
between the scope of government support and the scope of government supervision is essential to a healthy and sustainable financial system. One option is simply to adapt our regulatory and supervisory regime to the new wider implied reach of government lending support. This strikes me as an unattractive option, if for no other reason than the current uncertainty about the outer bounds of that support. Constraining moral hazard in such a regime would be an immense and daunting task. I take it as given, therefore, that the scope of financial safety net ultimately must be rolled back.

Note that it will not be sufficient simply to roll back the current lending programs when the economy recovers. The precedents that have been set during this episode will influence how market participants expect policymakers to react during the next episode of financial market turmoil. Establishing a coherent and stable financial regulatory regime will require rolling back expectations about how the policymakers will respond to the next financial market disturbance. Rolling back those expectations will be impossible if moral hazard concerns are always set aside in the exigencies of a crisis.\footnote{Assessing the effects of financial market turmoil on real economic spending is not as straightforward as it might seem. One popular notion is that the credit market disruptions we’ve seen over the last year or so impede the financial sector’s ability and willingness to extend credit to households and business firms, thereby creating an additional drag on spending. But causation can flow in the opposite direction as well. When overall economic activity seems poised to contract, the outlook for household income and business revenues deteriorates as well, and such borrowers become less creditworthy, all else constant. My reading of current conditions is that bank lending is constrained more now by the supply of creditworthy borrowers than by the supply of bank capital. The decline in U.S. housing activity since early 2006 has affected not only credit markets – it has had a significant impact on broader economic activity as well. For a time, the weakness was isolated in the housing market, as the rest of the economy continued to expand at a relatively healthy rate. But late last year, consumer spending began to slow. Household net worth has declined as home prices have fallen virtually nationwide over the last year-and-a-half, and, more recently, equity prices have slumped. Increases in energy prices up through the middle of this year took a substantial bite out of real incomes. Moreover, payroll employment peaked last December, and has since shed 1.2 million jobs. As the labor market has weakened, wage growth has tapered off. Except for the temporary bulge due to the stimulus payments earlier this year, real personal income has steadily decelerated, and is now below where it was a year ago. Given this catalog of adverse developments for U.S. households, it should be no surprise that consumer spending was sluggish in the first half of the year and has fallen significantly in recent months.}

When household spending slows substantially, business capital investment is usually not far behind. Business spending on equipment and software fell in the first half of 2008, and the near-term outlook is not favorable. Many firms are facing dimmer sales prospects, higher funding costs, and more restrictive borrowing terms. The other segment of business fixed investment, spending on new structures, has been booming recently.
2007 and the first half of 2008, real nonresidential fixed investment – a segment that includes office buildings, hotels, malls and the like – grew at a 14 percent annual rate. That category seems to have topped out over the summer, and is certain to decline in coming months.

Foreign trade has added significantly to GDP growth last year and the first half of this year. Unfortunately, the trade contribution to U.S. growth is likely to decline in the near term in response to diminishing world growth prospects and the recent strength in the dollar.

Two days ago, the National Bureau of Economic Research officially confirmed what virtually all economists already knew – namely, that a recession began last December when payroll employment peaked. For a time, the decline was fairly mild – in fact milder than the last two recessions, both of which were themselves mild by historic standards. But conditions downshifted dramatically sometime in September, just as financial market turmoil was accelerating. Since then, according to reports, many households and firms are taking a “wait and see” attitude, reducing or postponing nonessential outlays in response to a general sense of uncertainty about the potential meaning of these dramatic events for their own economic circumstances. A wide array of economic indicators has deteriorated markedly since then as well.

Looking ahead, uncertainty about the outlook is greater than usual, though probably not greater than is typical for this phase of a business slowdown. It strikes me as reasonable to expect the U.S. economy to regain positive momentum sometime in 2009, for several reasons. First, monetary policy is now quite stimulative. Second, the energy and commodity price shocks that dampened economic activity earlier this year have subsided already or are in the process of doing so. And as I’ve mentioned, the drag from housing seems likely to lessen in the next year, and in fact, I would be surprised if we don’t see a bottom in housing construction sometime in 2009. This is the third straight year, however, that I’ve been expecting a bottom in the housing market in the middle of next year, so my outlook is tempered by more than the usual amount of humility.

While the downturn in real economic activity is going to pose challenges for monetary policy in the period ahead, it’s essential that we not let inflation drift from view. Since 2004, overall inflation has trended upward, and has been higher than I would like, over the last few years. Much of the acceleration we saw earlier this year reflected energy prices, however, and with oil prices down we have seen overall inflation subside in recent months.

Many economists are forecasting relatively low inflation in the months ahead, on the grounds that widening economic slack is generally associated with declining price pressures. While this correlation is detectable in many datasets, I would be cautious about relying on it as a causal relationship. And while it may seem premature to be worrying about how inflation behaves after the recession is over, we need to be sure our policy remains consistent with a strategy that does not allow inflation to ratchet up over the business cycle.
As I said at the outset, these are not the best of economic times. We have weathered economic downturns before, however, both nationally and globally. And there is no sign that the fundamental creative process that drives innovation and improves well-being over time has been mortally wounded. What sets this episode apart is the nature of the turmoil plaguing the financial sector, and the array of unprecedented government lending programs. While navigating the slowdown in real economic growth is a challenge, the larger and more significant challenge will be to re-establish the boundaries around central bank lending and public sector support and reconstruct the relationship between the public sector and financial markets. How well we meet this challenge will determine the extent to which innovation, despite the associated volatility, will continue to contribute to the effectiveness of our financial system and to overall economic growth.

1 I am grateful to Roy Webb and John Weinberg for assistance in preparing this address. This is a revised and abridged version of a speech I gave in Bethesda, Maryland, on November 21, 2008.