Recent Financial Developments and the U.S. Economic Outlook¹

Good afternoon. I'm honored by the invitation to speak to you today, and I'm especially pleased to have the chance to visit Los Angeles, where, as you may know, our Reserve Bank has a major branch. This is such an important metropolitan area, both for the District and for the nation, that I particularly welcome the opportunity to exchange views with you about local and national economic conditions, and I'm looking forward to a lively question-and-answer session following my remarks.

I would like to focus on recent developments in financial markets. I will discuss their impact on the prospects for the U.S. economy, and offer my perspective on the policy actions that the Fed has taken to address them, including steps to improve liquidity in financial markets and also the decision of the Federal Open Market Committee, several weeks ago, to ease the stance of monetary policy by reducing the federal funds rate by 50 basis points. Before I continue, I want to emphasize that these remarks reflect my own personal views and not necessarily those of the Federal Open Market Committee.

Let me begin with the financial markets and review some of the recent developments I consider to be relevant in evaluating the prospects for the economy going forward. Beginning in mid-July, global financial markets became highly volatile and increasingly averse to risk. In the U.S., perhaps the most dramatic illustration of the

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ensuing flight to safety was the decline in the three-month Treasury bill rate, which dipped by almost 2 percentage points between mid-July and August 20th.

Dramatically wider yield spreads on credit default swaps, which provide insurance against default on the underlying securities, are further evidence of increased risk aversion in financial markets. Indeed, wider spreads became evident for a host of underlying instruments, from mortgages to corporate bonds, with lower-rated instruments seeing especially big increases in spreads. At the same time, options-based implied volatilities on a range of assets, from equities to foreign exchange, increased markedly, reflecting heightened uncertainty about the future. Treasury bill rates partially rebounded from their lows in August, and credit default spreads abated somewhat, but risk aversion remains notably high. This same turbulence has hit markets abroad, where risk spreads and implied volatilities are up, and there has been a significant flight to safety.

Borrowing costs facing households and firms directly influence their spending decisions and aggregate demand and, for this reason, they are of particular relevance to monetary policy. On the corporate side, prime borrowers have experienced little net change in their borrowing costs because higher spreads have been offset by lower Treasury rates, which, have been influenced both by the flight to safety and, of course, by actual and expected Fed action to cut the funds rate. Issuers of low-grade corporate bonds with greater credit risk, in contrast, face moderately higher borrowing costs.

The mortgage market has been the epicenter of the financial shock, and, not surprisingly, greater aversion to risk has been particularly apparent there, with spreads above Treasuries increasing for mortgages of all types. Although borrowing rates for low-risk conforming mortgages have actually decreased, other mortgage rates have risen,

including those available to some borrowers with high credit ratings. In particular, rates on jumbo mortgages, both fixed- and adjustable-rate, have risen since mid-July.

Subprime mortgages—which have been a major trouble spot—have become difficult to get at any rate. And that reflects another sign of the increased caution of market participants, specifically, more restricted credit terms and availability. In the mortgage market, lenders have tightened credit standards, making nonprime and jumbo mortgages available to fewer borrowers. For example, mortgage lenders report raising FICO scores and lowering allowable loan-to-value ratios in many mortgage loan programs, and many subprime programs have been shut down altogether.

Moreover, some markets have been experiencing illiquidity; in other words, the markets themselves are not functioning efficiently, or may not be functioning much at all. I am referring particularly to the markets for securitized assets, such as mortgage-backed securities, and that for asset-backed commercial paper. This illiquidity has become an enormous problem for companies that specialize in originating mortgages and then bundling them to sell as securities. The markets for selling these securities have all but dried up, except for the lowest-risk, "conforming" agency mortgages that can be sold to Freddie Mac and Fannie Mae. The asset-backed commercial paper market is where many firms, including financial institutions, get short-term funding. With liquidity problems in the markets in which many mortgage companies both sell assets and borrow, these firms have faced serious challenges, and a few have gone out of business.

Depository institutions also have faced some illiquidity, specifically in term interbank funding markets—those for maturities in the one- to six-month range—as banks sought to conserve their liquidity. A concern that has added to the illiquidity of

these markets is that mortgages and other assets that are normally securitized may come back onto banks' balance sheets and that customers may draw on unsecured credit lines. Although liquidity in these markets has improved since mid-September, they remain impaired.

Many of the liquidity problems afflicting banks and other financial market participants are gradually being resolved, but it's not clear that all markets will return to "business as usual," as defined by conditions in the first half of this year, even after that occurs. For one thing, many of the structured credit products that became so widely used may prove to be too complex to be viable going forward, and this would more or less permanently reduce the quantity of credit available to some risky borrowers. Moreover, as I mentioned, if financial intermediation that was routinely conducted via asset securitization and off-balance sheet financing vehicles ultimately migrates back onto the books of the banks, borrowing spreads and lending terms are likely to remain tighter given current limitations on bank capital and the higher costs of conducting intermediation through the banking sector. Most importantly, the recent widening of spreads appears to reflect a return to more realistic pricing of risk throughout the economy. This development may be positive for the long run, but it will be contractionary in the short run.

To assess how financial conditions relevant to aggregate demand have changed, we must consider not only credit markets but also the markets for equity and foreign exchange. These markets have hardly been immune to recent financial turbulence, but the changes since mid-July are, on balance, less dramatic. Broad equity indices have been

very volatile, but, on the whole, they are little changed since mid-July. As for the dollar, it has declined on a trade-weighted basis, but only moderately.

The Fed has three main responsibilities that pertain to these developments: promoting financial stability to help financial markets function in an orderly way, supervising and regulating banks and bank holding companies to ensure the safety and soundness of the banking system, and conducting monetary policy to achieve its congressionally mandated goals of price stability and maximum sustainable output and employment.

With regard to its responsibilities for financial market stability, the Fed took a number of steps to help restore liquidity in the financial markets. One step in the second week of August involved a sizable injection of reserves to prevent the federal funds rate from rising above its 5¼ percent target in the face of huge demands for short-term, liquid funds. In addition, on August 17 the Fed announced a cut in the discount rate of 50 basis points, which narrowed the spread with the target federal funds rate. The announcement also indicated that term loans would be made available for periods up to 30 days, renewable by the borrower. Furthermore, the Fed made clear that asset-backed commercial paper, which had become highly illiquid, is acceptable as collateral for discount window borrowing. These efforts to encourage the use of the discount window were designed to promote the restoration of orderly conditions in financial markets by providing depositories with greater assurance about the cost and availability of funding. While helpful, these actions have not, however, served as a panacea.

In its role as a supervisor and regulator of banks, the Fed has long focused on insuring that banks hold adequate capital and that they carefully monitor and manage

risks. As a consequence, the strong capital positions of banks should be helpful to them in weathering the financial turmoil. The Fed is carefully monitoring the impact of recent financial developments on the banking system and on core institutions involved in the payments system. Importantly, the Fed's supervisory role has facilitated the collection of timely and reliable information on developments in banking and capital markets, and the insights gained through this process have been critical in shaping the Fed's response in recent weeks.

For the conduct of monetary policy, the main question is how financial developments and other economic factors are likely to affect the outlook for the U.S. economy and the risks to that outlook. The reason this is the main question is that monetary policy's unswerving focus should be on pursuing the Fed's congressionally mandated goals of price stability and full employment.

This brings me to the issue of "moral hazard," a topic that has been much discussed since the recent financial turbulence began. A concern that is frequently expressed is that an easing of the stance of monetary policy could end up shielding investors who misjudged fundamentals or incorrectly assessed risks from losses and thereby lead them to take inappropriate risks in the future because they think the Fed will act to cushion the consequences of their decisions. I have two responses to this concern. First, the Fed's policy response will not prevent a repricing of risk from occurring and investors who misjudged risks will surely suffer losses even if monetary policy is successful in keeping the economy on track. Second, I don't believe that the Fed should stand aside as a financial shock threatens to derail the economy, because that would run the risk of many innocent people being hurt by the loss of jobs and economic well-being.

So I believe that, in conducting monetary policy, the Fed should retain a clear focus on how financial market developments are likely to affect employment, output, and inflation and not be concerned with who wins and who loses in financial markets.

With those principles in mind, let me briefly review recent economic developments. The U.S. economy turned in a fairly good performance in the first half of the year. Growth in the first quarter was weak, but it picked up to a robust pace in the second quarter. Overall, it appears that the economy turned in a reasonably good performance in the third quarter as well. Output growth appears to have been pretty solid even though growth in payroll employment in the private sector slowed noticeably in August and September to only 52,000 jobs on average from an average of 111,000 jobs over the prior six months. Recent data on personal consumption expenditures have been robust. Manufacturing output and orders for core capital goods have been upbeat, and business investment in equipment and software promises to be a bright spot. Despite the hike in borrowing costs for higher-risk corporate borrowers and the illiquidity in markets for collateralized loan obligations, it appears that financing for capital spending for most firms remains readily available on terms that have been little affected by the recent financial turmoil.

That said, most of these data are too early to reflect the effects of the financial turmoil, and those effects are more likely to show up in data for the current quarter.

Indeed, the financial shock seems likely to intensify an already steep downturn in housing. As I noted, mortgage interest rates have risen and these increases seem likely to exert some negative impact on this sector. More important, in my view, are the potential effects stemming from disruptions to the availability of credit and the tightening of

mortgage lending standards that are occurring. The illiquidity in many segments of the market for mortgage-backed securities seems likely to limit credit flows and therefore to have at least some negative effect on real residential construction, depending on how long the disruptions persist. A key point is that, even as liquidity in mortgage-backed securities markets improves, the risk spreads incorporated in mortgage rates will likely remain higher on a long-term basis than they have been in recent years, and this could prolong the adjustment in the housing sector.

Indeed, forward-looking indicators of conditions in housing markets were pointing lower even before the financial market turmoil began. Housing permits and sales were trending down. Inventories of unsold new homes remained at very high levels, and they will need to be worked off before construction can begin to rebound. Finally, most measures of house prices at the national level fell moderately. Notably, despite these declines, the ratio of house prices to rents—a kind of price-dividend ratio for housing—remains quite high by historical standards, suggesting that further price declines may be needed to bring housing markets into balance. This perspective is reinforced by futures markets for house prices, which expect further declines in a number of metropolitan areas this year. The downturn in house prices would likely be intensified by a simultaneous decline in employment, should that occur, since significant job loss would weaken demand for housing and raise foreclosures.

Here in California, the rise and fall of house prices has been much like the nation's, only more so. In 2004 and 2005, many homeowners gleefully watched the meter tick up and up and up on their house values. But since then, things have changed dramatically. The pace of home sales has slowed substantially, and virtually every

metropolitan area in California has seen much larger downward swings in the pace of house price appreciation than the nation. In fact, the majority of them have recorded outright declines in average house prices over the past year. As I'm sure you know, these developments have hit close to home here in Southern California, where the once hot housing markets have cooled considerably.

California also has played a significant role in the problems with subprime mortgages that have swept the nation. This state used to have one of the lowest subprime delinquency rates in the U.S., but more recently it has seen them increase dramatically, so that now California ranks about in the middle of the states on this scale. Moreover, within the state, the various regions exemplify a wide range of experiences with problem loans. By one measure of delinquencies on all types of mortgages, three metro areas—the Inland Empire and Merced and Stockton in the Central Valley—are in the top ten in the entire U.S. In contrast, here in the Los Angeles-Long Beach area, delinquency rates are running at about the middle of the pack among metro areas for the country.

Now let me return to the national economy. Beyond the housing sector's direct impact on GDP growth, a significant issue is its impact on personal consumption expenditures, which have been the main engine of growth in recent years. Indeed, data on consumption spending in the last few months have continued to show strength. The nature and extent of the linkages between housing and consumer spending, however, are a topic of debate among economists. Some believe that these linkages run mainly through total wealth, of which housing wealth is a part. Others argue that house prices affect consumer spending by changing the value of mortgage equity. Less equity, for example, reduces the quantity of funds available for credit-constrained consumers to borrow

through home equity loans or to withdraw through refinancing. The key point is that, according to both theories, a drop in house prices is likely to restrain consumer spending to some extent, and this view is backed up by empirical research on the U.S. economy.

Indeed, in the new environment of higher rates and tighter terms on mortgages, we may see other negative impacts on consumer spending. The reduced availability of high loan-to-value ratio and piggyback loans may drive some would-be homeowners to pull back on consumption in order to save for a sizable down payment. In addition, credit-constrained consumers with adjustable-rate mortgages seem likely to curtail spending, as interest rates reset at higher levels and they find themselves with less disposable income.

Another engine of growth that could be a little weaker going forward due to the ongoing turmoil is foreign economic activity. Foreign real GDP—weighted by U.S. export shares—advanced at robust rates of 3¾ to 4 percent in 2004 and through the first quarter of this year. This growth was widespread, affecting nearly every continent. With the trade-weighted dollar falling over this same period, U.S. exports have been strong—real exports increased by an average of nearly 8 percent during 2004 through 2006. Partly for this reason, U.S. net exports, which consistently held growth down from 2000 to 2005, actually gave it a lift during 2006. Before the recent global financial turmoil, I had assumed a modest deceleration in world economic activity, which meant that net exports were likely to "turn neutral"—neither retarding nor stimulating growth in the year or so ahead. At this point, it's still very difficult to gauge the likelihood of this "neutral" scenario, but it does seem safe to say that these developments add some downside risks to it.

To sum up the story on the outlook for aggregate demand, I see downward pressure based on recent data indicating further weakening in the housing sector and the tightening of financial markets. As I have indicated, a big issue is whether developments in the relatively small housing sector will spread to the large consumption sector, perhaps through declines in house prices. Should the decline in house prices occur in the context of rising unemployment, the risks could be significant.

Turning to inflation, signs of improvement in underlying inflationary pressures are evident in recent data. Over the past twelve months, the price index for personal consumption expenditures excluding food and energy, or the core PCE price index, has increased by 1.8 percent. Just several months ago, the twelve-month change was quite a bit higher, at nearly 2½ percent. It wouldn't surprise me if core PCE price inflation edged down a little bit more over the next few years. This view is predicated on continued well-anchored inflation expectations. It also assumes the emergence of some slack in the labor market, as well as the ebbing of the upward effects of movements in energy and commodity prices. However, we do still face some inflation risks, mainly due to faster increases in unit labor costs and the depreciation of the dollar, and these will need to be watched carefully.

With that view of recent financial developments and the outlook for the U.S. economy, I'd like to turn to monetary policy. On September 18, the FOMC reduced the federal funds rate target by 50 basis points. In the accompanying press release, the Committee noted that the financial shock has the potential to intensify the housing correction and to restrain economic growth more generally. The action at the September

meeting was meant to help "forestall" some of the potential fallout to the economy from the disruptions in financial markets and to promote moderate growth over time.

The Committee's decision reflected a forward-looking and preemptive approach to policy. The policy move was not primarily a reaction to data in hand at the time of the meeting. Under the circumstances, available information on spending and output mainly reflected conditions before the financial disruptions began and was therefore less informative than under normal conditions about the appropriate stance of policy.

I believe that it was important to put a substantial easing in place in September so as not to fall "behind the curve." Given the long lags between policy actions and their impact on the economy, and the possibility that economic downturns can be difficult to reverse once they take hold, a more gradual and reactive approach would have created unnecessary economic risks. That said, it is inherently difficult to assess the stance of policy that is needed to ensure that the economy would grow at a moderate pace given uncertainties about financial developments and their impact on the economy.

I view the Committee's decision as reflecting a sensible balance in striving to achieve our twin goals—maximum sustainable employment *and* low inflation. The Committee noted in its statement that "some inflation risks remain." I nevertheless considered the larger-than-usual cut in the funds rate prudent because of two features of the current environment. First, the stance of monetary policy before the September meeting was probably a bit on the restrictive side, at least according to many estimates of the so-called "neutral" or "equilibrium" federal funds rate. In fact, the stance of policy was growing more restrictive as core inflation gradually trended down. Second, with the economy operating near potential and inflation well contained, a case could have been

made that the funds rate would need to move down toward a neutral stance, even if there had not been a financial shock.

Finally, I'd like to emphasize what I hope my talk has already made clear—that these are uncertain times. Any forecast and any analysis of events should be made with a great deal of humility about its correctness. And that's why I am keeping an open mind about prospects for the future and why the Committee stressed, to quote from the statement, that it: "will continue to assess the effects of these and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth."

I'd be pleased to take any questions.

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