Good morning. I’d like to thank the Bay Area Council for inviting me to speak at this year’s annual outlook conference. This important event is just one of the many significant contributions the Council makes to help shape the future of the Bay Area economy, and I’m privileged to be part of the distinguished lineup of speakers.

During the last nine months financial markets have been in turmoil. The disruptions have impacted households, businesses and state and local governments throughout the country. In my remarks today, I’ll review the developments that led to the current economic and financial situation and offer my perspective on the outlook and Federal Reserve policy. Along the way, I’ll comment on developments in the Bay Area economy.

Let me begin with what seems to have been a trigger for the financial turmoil now facing the nation, namely, the decline in house prices in recent years. It was hardly surprising that house prices flattened out in 2006 and even began to decline more recently. There had been plenty of talk before then about a house price “bubble” and no one expected house prices to ratchet up at double digit rates forever.

---

1 For a fuller discussion of the issues presented here, see “The Financial Markets, Housing, and the Economy,” delivered on April 3, 2008, to the Stanford Institute for Economic Policy Research [http://www.frbsf.org/news/speeches/2008/0403.html]. I would like to thank John Judd, Rob Valletta, and Judith Goff for their support in preparing these remarks; as always, they remarks reflect my own views and not necessarily those of my colleagues in the Federal Reserve System.
In themselves, house price declines are a concern for monetary policymakers because they reduce the wealth of households, and that can have a chilling effect on consumer demand, which, in turn, can put a chill on overall economic activity. Indeed, even as house prices were rising, economists in the Fed and elsewhere were analyzing how a downturn in the housing sector might affect the economy and evaluating potential policy responses. At the time, however, it was simply not anticipated that house price declines would contribute to such burgeoning delinquencies and defaults among subprime borrowers, and that those problems would set off a chain of events that would rattle the financial system, resulting in the credit crunch that is now severely restraining economic activity and employment.

Subprime markets

Let me briefly trace this chain of events, beginning with developments in the subprime market. In the late 1990s, the subprime market was fairly small and slow-growing, but after the 2001 recession, it took off. By one estimate, in late 2007, it made up about 13 percent of the overall mortgage market. Through late 2005, things seemed to be going well, with subprime delinquencies remarkably low in most areas of the country, including the West.

Today the picture is very different: Close to 20 percent of subprime mortgages are delinquent or in foreclosure nationwide. “Hot spots” include parts of Nevada, Florida, Ohio, and California, where the highest delinquency rates are in the Central Valley.

The Bay Area has not been immune. In some cities, such as Fairfield and Vallejo, subprime mortgages accounted for over one-fourth of new originations in 2006, and in
2007, delinquencies and foreclosures there increased sharply. By contrast, subprimes accounted for only about one-tenth of new mortgages in 2006 in San Francisco and the peninsula, and delinquencies and defaults there have remained relatively low.

Research confirms that the factors one would intuitively expect to influence delinquencies and defaults have, in fact, mattered; these include broad economic conditions and the riskiness of the borrowers, which, as is well known, was heightened by increasingly lax underwriting standards. But research also reveals that the single best predictor of subprime delinquency rates is the pace of house price changes. For example, in Vallejo and Fairfield, house prices fell more than 20 percent over the past twelve months and are down nearly 30 percent since late 2005. By contrast, house prices have held up better in San Francisco and Marin, due largely to supply constraints and local amenities that keep housing in very high demand. But for the Bay Area as whole, median home prices have come down substantially—by 11.6 percent in February relative to twelve months earlier. Based on futures markets for home prices, further downward adjustments are likely to occur.

The link between house prices and delinquency rates is not surprising. When house prices have been stagnant or declining, a borrower with a recent mortgage secured with a very small or no down payment has little, if any, equity in the house and, therefore, can’t rely on it to help weather income and wealth stresses like job loss, illness, or divorce. Moreover, though some borrowers may be able to afford their loans, they may decide just to walk away, if, for example, their house is worth less than their mortgage.
I should also note that, while default rates for prime loans are lower than for subprime loans, delinquency rates among all categories are highly correlated with house price declines across the country, whether borrowers are prime or nonprime, or whether loans have fixed or variable rates.

Finally, though many thought that interest rate resets played a major role in the growing delinquencies and foreclosures, research indicates that they did not—at least, not yet. The vast majority of subprime loans are recent vintages, so only a fraction had hit reset dates as of late 2007. Moreover, in many cases, the initial, or so-called “teaser,” rates were not set that far below prevailing rates on variable-rate mortgages, which indeed, have come down since last summer.

Credit crunch

The chain of events leading from delinquent subprime mortgages to an economy-wide credit crunch is long and complex, so I will only sketch out the main links. When it became apparent that the problems in the subprime mortgage market were far worse than expected, the ratings on securities that had been backed by these mortgages and other similar assets were downgraded dramatically. That started a race to unload them, driving the prices of these assets lower. Declining asset prices, combined with growing credit losses, have eroded the capital cushions of banks and other leveraged financial institutions. Some banks have also been stuck holding loans they intended to securitize but now cannot due to the illiquidity in the markets for such assets. Most financial institutions now face intense pressure to reduce the leverage on their balance sheets. Though some are succeeding in raising new capital, they also are seeking to scale back
their leverage by reducing their total volume of loans outstanding. The consequence is that banks are stiffening up their terms of lending to households and business and are reducing the availability of credit. For example, interest rates are up on the jumbo mortgages which are so prevalent in the Bay Area.

The credit crunch has had widespread repercussions, even in markets unrelated to residential mortgages. There are now notably wide spreads between the rates on ultra-safe Treasury bonds and the rates on many other debt instruments—a sign of general risk aversion among investors. This has caused the interest rates on low-grade corporate bonds to shoot way up. Moreover, securities backed by other types of loans—such as those on credit cards, commercial real estate, and autos, as well as business, and student loans—also have sharply declined in price or become illiquid. In addition, the market for auction-rate securities, or ARS, has been in a meltdown. The low rates available on these bonds versus traditional fixed-rate debt have been attractive to municipal agencies and nonprofit institutions in recent years, and they have grown accordingly. In recent months, however, investors grew wary about these bonds, because of concerns about the reliability of ARS debt insurers, who were exposed to securitized subprime mortgages. This pullback by investors led to widespread auction failures, leaving some borrowers saddled with much higher interest costs due to automatic rate resets. As a result, local government agencies, including some in the Bay Area, have been scrambling to refinance their ARS debt through fixed-rate bonds or other variable-rate debt—at noticeably higher interest rates than were available before the ARS meltdown.

Economic outlook
Turning to the economic impacts, the credit crunch combined with, and intensified, the housing downturn to deliver a double blow to national economic activity in the fourth quarter of last year. Growth slowed from a robust pace earlier in the year to a rate of only about ½ percent. In fact, the contraction in spending on housing construction subtracted a full percentage point from U.S. real GDP growth last year, and nearly as much the year before. It seems likely that this sector will be a major drag on the overall economy through the end of this year and into 2009.

Until recently, the deflating housing bubble had not spilled over to the rest of the economy. But now it has. It appears that growth in consumption and business investment spending has slowed markedly after years of robust performance, and, as a result, the economy has all but stalled and could even contract over the first half of the year.

The factors weighing down consumer spending go beyond the effects of the credit crunch and the falling house prices. Consumers also face constraints due to the declines in the stock market, which have diminished their wealth. Furthermore, energy, food, and other commodity prices have risen sharply in recent years, essentially “taxing” their incomes. Finally, and very importantly, labor markets have weakened. Business payrolls have declined in recent months, and the unemployment rate jumped in March. In the Bay Area employment has fallen since the beginning of the year and job losses are especially pronounced in construction and financial activities. It is no wonder that the Council’s poll results show Bay Area business confidence at its lowest level since the poll started in 2001, and that nationally consumer confidence has declined to a 26-year low.
Although business capital investment remained robust through the end of last year, it would not be surprising to see firms slow and perhaps even cut into this spending this year in response to overall economic softening and tighter credit conditions. This is especially true for nonresidential construction, which grew by over 15 percent in real terms last year, but now faces serious financing constraints from the credit crunch.

Investment in high-tech equipment and software was strong through the fourth quarter and this sector looks set for growth in the months ahead. But there are some signs of slowing, as orders have fallen off, and there are indications that the demand for computers is softening. This is, of course, a big issue for the Bay Area, since it is the nation’s leading metropolitan area in the size and density of its information technology—or, IT—manufacturing and services sectors.

Spending on IT is a large and growing share of total capital spending, and it exhibits substantial cyclical volatility. Close links are evident between its growth and job growth in urban technology centers such as the Bay Area.2 The most recent IT cycle—the spending boom of the late 1990s followed by the bust between 2000 and 2003—is one that all of us here will long remember. During the bust, about one-third of Bay Area IT manufacturing and services jobs disappeared. This consolidation was painful, but it left the local industry well-positioned to take advantage of domestic and international growth in IT demand during 2005 to 2007. During these years, the Bay Area IT sector saw substantial gains in jobs and output, which helped produce vibrant local economic conditions more generally. Even though signs of a slowdown have emerged this year, our area’s unique combination of a highly skilled and mobile labor force, an extensive

---

and energetic venture capital community, active involvement from local research universities, and far-reaching ties to overseas production networks leaves the Bay Area IT sector well-positioned for long-term growth.

A bright spot for the national and Bay Area economies is foreign trade. Exports have done very well due to stronger economies abroad and the dollar’s decline. Here in the Bay Area, IT manufacturers and service providers appear to have kept expanding despite the national economic slowdown partly because of strong demand from abroad. And San Francisco has been benefiting from growth in foreign tourism spurred in part by the lower value of the dollar. I expect trade to remain a source of strength for the national and regional economies, but there are some risks. For some countries—especially in Europe—the ongoing financial turmoil is having direct negative impacts, and other countries are likely to suffer indirect impacts from any slowdown in the U.S.

Economic policies are another important factor in gauging the economic outlook. The stance of monetary policy has eased substantially in the past six months, and the fiscal stimulus package signed into law recently is well timed—with checks beginning to hit the mail in May. Both actions can be expected to boost growth in coming quarters. At the state and local level, however, the downturn is curtailing the growth of revenues from property, income and sales taxes, resulting in widespread cutbacks in planned spending. In California, these pressures have prompted Governor Schwarzenegger to declare a “fiscal emergency”.

This brings me to my bottom line for the outlook. Current indicators suggest that, starting in the fourth quarter, the national economy, at best, slowed to a crawl. I anticipate little or no growth in the first half of this year. With stimulus from monetary
and fiscal policy, economic performance should improve in the second half of this year. Nonetheless, these are particularly uncertain times. I see the risks to this outcome as skewed to the downside given the ongoing turmoil in financial markets, the continued contraction in housing, and the growing caution of households and businesses.

Now let me turn to inflation. Over the past year, inflation has been elevated by rising food, energy and other commodity prices and declines in the value of the dollar that have boosted import prices. However, several developments suggest that inflation is likely to moderate over the next couple of years. For example, broad measures of compensation have expanded quite modestly over the past year, and productivity growth has been fairly robust. In addition, futures markets point to a leveling out of energy and other commodity prices. Furthermore, the weakening in economic activity should put somewhat greater downward pressure on inflation going forward.

The Federal Reserve cannot, however, be complacent about inflation. Most survey measures of longer-run inflation expectations have remained reasonably well behaved. But measures of inflation compensation derived from the differential between nominal and real Treasury yields have moved up for the period of five-to-ten years ahead. Such measures are an imperfect indicator of inflation expectations, because they are affected by inflation risk and illiquidity. Nevertheless, these movements highlight the risk that our attempts to deal with problems in the real economy could lead to higher inflation expectations and an erosion of our credibility.

Monetary policy
With that in mind, let me discuss the Fed’s responses—first to the financial
market turmoil, which poses a threat to economic activity and employment, and second to
the weakness in economic activity itself. We’ve developed a number of approaches to
improve liquidity. Part of this effort, of course, was the arrangement to facilitate the
resolution of Bear Stearns’ liquidity problems, which threatened to worsen the turmoil in
financial markets, deepen the credit crunch, and further depress economic activity and
employment.

We have also sought to improve and protect market liquidity by making funding
available to a broader range of institutions—depository institutions and primary securities
dealers—for a longer term, and based on a broader range of collateral, including in some
cases mortgage-backed securities. These actions are distinct from monetary policy itself
because any effect they might have on reserves or the federal funds rate is offset by open
market operations. Their purpose is to avoid sharp disruptions of economic activity and
employment and to keep the transmission channels of monetary policy open and
functioning effectively.

With regard to monetary policy, the FOMC has taken significant steps since
September, cutting the federal funds rate by 3 full percentage points to an accommodative
level of 2¼ percent. I consider such accommodation an appropriate response to the
contractionary effects of the ongoing financial shock and the housing downturn, and I
anticipate that the resulting stimulus, combined with that of the fiscal package, will foster

---

3 We’ve lowered the spread of the discount rate above the federal funds rate; created a new auction facility
to make term loans to banks based on a broader range of collateral (the Term Auction Facility); a facility to
lend to primary securities dealers (the Primary Dealer Credit Facility); set up another facility to lend
Treasury securities in exchange for certain asset-backed securities (the Term Securities Lending Facility);
engaged in term repurchase agreements with primary dealers; and approved swaps with the ECB and Swiss
National Bank to enable them to increase dollar liquidity to institutions in their markets.
a moderate pickup in growth later this year. At the same time, consumer inflation seems likely to decline gradually to somewhat below 2 percent over the next couple of years, a level that is consistent with price stability.

However, economic prospects remain unusually uncertain, and the downside risks to growth are significant. Going forward, the Committee must carefully monitor and assess the effects of ongoing financial and economic developments on the outlook for output and inflation, and be prepared to act in a timely manner to promote the economy’s return to sustainable paths for output and employment.

# # #