Presentation to Securities Analysts of San Francisco and Global Association of Risk Professionals

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Perspectives on the National Economy and Monetary Policy

Good afternoon. I'd like to thank you for inviting me here today to discuss my views on the nation's economy and on monetary policy.

I know that I'm in the midst of a group of professionals who specialize in risk management. Since risk management is a focus of our work at the Fed, we have much in common. Indeed, I understand that some people on the staff of the San Francisco Fed who work in this area are members of the Global Association of Risk Professionals, one of the co-hosts of today's meeting. One of the Fed's key roles is to address issues of risk in the financial services sector. We supervise state banks that are members of the Federal Reserve as well as bank and financial holding companies. During the last decade, our examinations have become increasingly centered on the ability of the institutions we supervise to measure, monitor, and manage risk. Improvements in the risk management techniques employed in these organizations have, in my opinion, made our financial system far more resilient to shocks. Financial institutions weathered the Russian default, the turmoil caused by the collapse of Long Term Capital Management, the bursting of the stock market bubble, and the recent economic downturn exceptionally well.

* The opinions expressed in this speech are those of the author and do not necessarily reflect the views of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System.

A completely different responsibility that involves significant elements of risk management is the Federal Reserve's conduct of monetary policy. One of our key functions is to respond to shocks—that is, to unexpected events—that may undermine the performance of the U.S. economy. And that's one of the things I want to focus on today.

We certainly have had some major shocks in recent years. I'm not thinking only of the current oil price shock, which is a serious issue and one I'll go into later. I'm also thinking of several other shocks that have hit the economy over the last several years, and that, to some extent, are still reverberating.

One of those shocks has, for the most part, been very positive. It began back when I was on the Board of Governors in Washington in the mid-1990s. I'm speaking, of course, of the phenomenal surge in productivity, which was largely associated with advances in technology and investments in the equipment embodying that technology. For the past nine years, productivity in the U.S. has grown at a pace of over three percent a year—three times as fast as the average growth rate during the 1970s, the 1980s, and the early 1990s. Faster productivity growth has had some very positive effects on the economy. It has raised the economy's potential to grow and thus the pace of expansion that the economy can sustain in the long run. Productivity growth is the main driver of long-term trends in worker compensation. Faster productivity growth has therefore allowed average living standards to advance much more rapidly than before. Faster productivity growth enables firms to hold down costs. It thereby places downward pressure on inflation, helping us move toward price stability.

But faster productivity growth also had repercussions that created challenges for monetary policy. In the second half of the 1990s, this extraordinary productivity surge—coupled with the buildup to Y2K—led to a boom in investment that apparently went too far, collapsing

into an investment bust by 2000. Faster productivity growth also likely contributed to the excessive run-up and subsequent correction in stock prices. In 2001, of course, came the shock of the tragic events of 9/11, followed by the wars in Afghanistan and Iraq. On the heels of that came *another* shock—the corporate governance scandals. The result was serious erosion in confidence and extreme caution in the business sector.

In response to these negative shocks, monetary policymakers responded aggressively, slashing short-term interest rates in 2001 to their lowest levels in forty years. The risk of deflation prompted additional policy measures in 2003. The odds that the U.S. economy would slip into outright deflation were never very high. But the severity of the economic repercussions should deflation take hold warranted an extraordinary monetary policy response. Befitting its role as a "risk manager," the Fed addressed this serious "downside risk" by taking out an "insurance policy"—lowering the federal funds rate to 1 percent and stating its belief that monetary accommodation could likely be maintained for a "considerable period."

The Fed's actions helped to support consumer spending, particularly auto sales, and housing. These sectors stayed strong despite the 2001 recession and the lackluster performance that followed for the next year and a half. Two large tax cut packages in 2001 and 2003 coupled with a pickup in spending for defense and homeland security also provided fiscal impetus. By early 2004, the economy finally seemed to be on the road to a solid recovery: growth averaged a robust five percent between the first quarter of 2003 and the first quarter of 2004. Firms restructured their balance sheets. And the pace of investment spending picked up. The pace of job creation also increased: from March to May of this year, payroll employment rose at an average of nearly 300,000 jobs per month.

Unfortunately, toward the end of the second quarter of 2004, the economy apparently stumbled. Growth for the whole quarter came in at only three and a quarter percent, dragged down by especially sluggish growth in consumer spending. It is difficult to know exactly why consumer spending slowed, but higher oil prices head the list of likely culprits. Higher oil prices are imposing a tax on households amounting to roughly \$75 billion on an annual basis. The good news is that we've seen an improvement in the growth of consumer spending since early summer. In the third quarter, consumer spending on goods and services, including autos, appears to have rebounded from its sluggish performance in June. A partial glimpse at the third quarter's overall growth performance suggests a pickup in the growth of real GDP to a rate around 4 percent. The bad news is that the labor market has yet to regain its footing completely, generating only 100,000 jobs a month from June through September. Job creation on that scale is below what is needed to reduce the slack that remains in labor markets.

This brings me to the outlook. While recent results for activity are somewhat encouraging, I wouldn't say that we're completely "out of the woods" just yet. Indeed, there are some issues that have the potential to be troublesome going forward. As "risk managers" for the nation's economy, I think monetary policymakers need to pay attention to these issues, so I'd like to take a moment to touch on a few of them.

The first is oil. The price of oil rose from around \$30 per barrel last summer to around \$55 recently. Clearly, there's pressure from the supply side, given the significant political instability in major oil-producing regions like the Middle East, Venezuela, Russia, and Nigeria. In addition, the world's limited refining capacity is an issue, which certainly was not helped by the recent hurricanes in the southeastern U.S. Along with this pressure from the supply side,

these price hikes also are connected to very strong demand for oil—not only in the U.S. but also in emerging Asia, especially China—and that's leading to a sharp increase in oil consumption.

The risk, of course, is that higher oil prices can put a further drag on spending and simultaneously create inflationary pressure. In saying that, I don't mean to conjure up the grim days of the 1970s, when oil price shocks hit the economy very hard. Although oil prices are at all-time highs in nominal terms, they're only about half of what they were thirty years ago on an inflation-adjusted basis. Moreover, in the course of those thirty years, the U.S. economy has also become much less dependent on oil. So the effect on today's economy is nowhere near as huge as it was on the economy back then. But what adds to concerns about the higher oil prices is the possibility that they might continue, or even worsen, cutting further into people's and firms' ability to spend. Generally, when oil prices spike, the futures market expects them to retreat quickly. But recent developments suggest that the market sees a large portion of the recent oil shock as long-lasting, since the futures prices a year or so ahead have risen by almost as much as the current price. If an oil price spike is perceived as transitory, households are more likely to maintain existing spending patterns by lowering saving. Persistent oil price hikes, in contrast, seem likely to generate a larger and more persistent consumption response.

Higher oil prices inevitably raise headline inflation for a time. The real risk, as we learned during the 1970s, is that an uptick in inflation due to oil can become incorporated into inflationary expectations and built into subsequent wage and price setting. Such an outcome is unlikely if inflationary expectations are well-anchored. The evidence suggests that inflationary expectations *are* well-anchored. We see this not only in a variety of surveys, but also in the markets, where there has been little change in the inflation compensation implicit in the spread between the yield on Treasury bonds and on Treasury inflation-indexed securities. That said, the

Federal Reserve cannot take the public's trust in its commitment to price stability for granted. It must remain vigilant and willing to act to insure price stability. As I said, oil markets represent a risk, and one that will have more serious repercussions the longer oil prices stay high.

Beyond the oil price shock, I think it's worth looking at other developments that also can weigh on consumers and businesses and tend to make them rein in their spending. In terms of the consumer, the sluggish job market could significantly restrain spending, as it lowers growth in disposable income and threatens to undermine consumer confidence. Another potential source of restraint going forward is the very low personal saving rate. As I'm sure you know, consumers were a very important prop to the economy during the recession and the recovery. In fact, their resilience was pretty surprising. But to keep that up, they had to spend an ever increasing fraction of their disposable incomes. Of course, at the same time, consumers have also seen increases in wealth, especially their housing assets. It remains to be seen how long the pattern of low savings will be maintained, especially if house prices were to increase more gradually or decline. Any noticeable attempt by households to improve their finances by cutting spending could seriously undermine the strength of the expansion.

Another area of risk—and one that may seem surprising—is business investment.

Although it *has* been strong, it is probably less strong than one might expect, given the highly favorable "fundamentals"—very high corporate profits and cash flow, the low real interest rates that we've seen in recent years, and solidly growing demand. However, for the first time in decades, business cash flow has actually exceeded total capital investment. This suggests a continuation of the caution that has marked business decisionmaking in the wake of the terrorist threats and the issues surrounding corporate governance. This caution may also explain the inability of the labor market to establish sustained strength.

If this cautious attitude were to continue, it could become especially troublesome next year as the impetus to the economy from fiscal stimulus wanes. Most estimates suggest that, while the effects of the tax cuts and spending increases have been significantly positive for economic growth last year and this year, they will turn to being roughly neutral by 2005. This means that the main impetus to growth will have to come from business investment and consumption.

Finally, there's the issue of the trade gap. It has risen from near balance in the mid-1990s to a deficit of around \$600 billion now, and it subtracted around a full percentage point from real GDP growth in the first half of this year. Traditionally, the U.S. economy has been considered a relatively closed economy, so that developments in trade had only minor implications for our economic growth. However, with the trade gap currently so large, uncertainty about its future course now poses significant issues for our real GDP growth. And its future course depends importantly on the strength of domestic demand among our trading partners because that affects demand for our exports. However, most of our major trading partners have had only sluggish growth in domestic demand recently, although their overall real GDP growth has been relatively healthy. One economy with strong domestic demand has been China; but, even there, concerns about overheating have led to efforts restrain its economy. So long as these conditions prevail among our trading partners, they will not provide much impetus for growth in our own economy.

Now let me turn briefly to the inflation outlook. Higher oil prices, coupled with increases in both commodity and import prices pushed up overall inflation in the CPI to over a 4 percent rate in the first half of this year. Core inflation also rose at a somewhat elevated 2-1/2 percent in the first half of this year. However, both indexes dropped back to more subdued rates in the third quarter—2 percent for the overall index and 1-1/2 percent for core inflation. As I noted earlier,

longer-run inflationary expectations seem subdued.. So despite the uncertainties raised by oil prices, inflation---especially core consumer inflation---seems to be relatively well contained at present. Moreover, there are some fundamental factors tending to push inflation down, including the remaining slack in labor and product markets and continued rapid growth in productivity.

Now let me try to pull all of these threads together and lay out what they imply from the perspective of monetary policy. At this point, policy, in my view, is still accommodative. The federal funds rate is at one and three-quarters percent, and, with overall inflation a bit higher than that over the past year, the "real" or inflation-adjusted federal funds rate is slightly below zero, well below its historical average of around 2 3/4% over the last forty years. This suggests that short-term interest rates eventually have to go up to prevent an increase in inflation. The policy challenge is to consider two questions: "how far?" and "how fast?"

To begin to answer the question "how far," economists compare the funds rate to a benchmark called the long-run equilibrium or "neutral" real rate. This is the rate that would be consistent with full employment of labor and capital resources and price stability over the long run. I should emphasize that estimates of the long-run equilibrium rate are highly uncertain and may change over time due to changes in productivity growth, the structural budget deficit, and other fundamentals. Analysts commonly compute the "neutral" real rate via computations with econometric models of the economy. Such models tend to put the mean "neutral" real rate in a range of 2 to 3%, which is in the vicinity of its actual 40-year historical average. Of course, an inflation component must be added to obtain a neutral value for the nominal funds rate. With the real federal funds rate currently near zero, such calculations suggest that the real funds rate eventually will need to rise considerably above its current level for policy just to have a neutral effect on the economy.

In making decisions in real time, however, policymakers also need to estimate an intermediate-term equilibrium real rate that would promote full employment over the next several years. I've spent some time today discussing a number of demand factors that have tended to restrain growth, or threaten to restrain growth in the future; in other words, these factors may be holding the intermediate-term equilibrium real rate down. A first factor is the waning of the stimulus from fiscal policy next year. A second factor may be the unusual business caution that seems to be playing a role in sluggish job growth and investment spending that is not as strong as would be expected based on the "fundamentals" commonly incorporated into econometric models. While it's difficult to pin down the exact nature and extent of this caution, terrorism and uncertainty about corporate governance and the energy supply are commonly cited by corporate executives.

Another factor that may be working in the same direction is the dollar, which has remained relatively high despite our large and growing trade deficit. A high dollar makes imports less expensive for us and makes our exports more expensive abroad, thereby undermining the demand for domestic output. In order to offset this drag on the demand for domestically produced goods and services, interest rates must be lower than would otherwise be necessary to produce full employment in our economy. A relatively high dollar depresses the equilibrium real rate.

So, for a number of reasons, the intermediate-run equilibrium real rate appears to be below its historic average and below model-based estimates of the long-term rate. I want to emphasize that there are probably even more uncertainties involved in estimating the intermediate-term equilibrium rate than there are in estimating the long-term rate. That's why I wouldn't be confident at all about giving you an actual estimate of the intermediate rate. But I

do think it's likely that the intermediate rate is below the long-term rate. This means that while policy is stimulative, it's not as stimulative as suggested by estimates of the long-term equilibrium rate.

At its last three meetings, the FOMC tightened policy slightly. The Committee indicated in its statement that, based upon what it then knew, removal of policy accommodation at a "measured pace" would most likely prove appropriate to promote a healthy outlook for the economy—a moderate acceleration in growth with well-contained inflation. Of course, we must remain very watchful as developments unfold, and be prepared to consider modifications in our course of action as needed to ensure price stability and full employment. For example, there would be a need to consider moving more aggressively if inflation showed signs of rising significantly. But as I said, core inflation appears to be well contained. Alternatively, there might be a need to consider pausing in the process of raising rates if slower growth in demand caused economic activity or labor market activity to slow down, perhaps for some of the reasons I've emphasized in my remarks today. By the same token, if inflation were to fall much further below recent rates, we would need to consider pausing.

Overall, it seems clear that the federal funds rate will need to rise as we go forward, but the pace of that increase will need to be closely linked to unfolding events. And I think it's important that we keep the public well informed of our thinking on these issues.

Indeed, an emphasis on communication and transparency has become a key feature of current monetary policy. One reason for the focus on communication is that economic developments are affected by longer-term interest rates, equity values, the exchange rate, and other asset values—and these factors depend not only on the current funds rate, but more importantly on the expected *future* path of the funds rate. Clear, straightforward language that

helps explain to markets and the public what the Fed is looking at, and why, can make policy more effective by fostering the appropriate expectations and decisions. Moreover, it also can help policymakers avoid creating their *own* shocks, which can lead to disruptions in financial markets.

I hope that my comments today have done their part to communicate clearly my thinking as a Fed policymaker. Now I'll be glad to take any questions.

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