Speech to a Community Leaders Luncheon
Anchorage, Alaska
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The U.S. Economy and Monetary Policy

Good afternoon, everyone. I'm delighted to have the opportunity to speak to you today. This is my first trip to Alaska as the President of the San Francisco Fed, and, in preparation, I reviewed some of the economic statistics about this region. The numbers say that local employment has been growing at a healthy clip this year, especially in the travel and tourism sector. As a policymaker, it is very nice for me to be able to have those statistics come to life, seeing firsthand the vigor of the economy in Anchorage. As a tourist, I'm glad to be doing my part to boost the economy here, and so far it has been a pleasure. For example, yesterday, a group of us visited your outstanding Museum of History and Art, and the exhibits were truly impressive, as are the plans for its expansion. The museum is a fitting jewel box for the many treasures it holds of the past and present of the people and cultures of this state.

Alaska, of course, is not only famous for its immense natural beauty and its fascinating cultures. It also is the home of many of the key natural resources the U.S. economy depends on, and tomorrow I will get a chance to see a bit of that side of the state. Helvi will escort several of us to the DeLong Mountains where we will tour the Red Dog mine, which operates on land owned by the NANA Regional Corporation. From there, we will go to Kiana, a fishing village 30 miles inside the Arctic Circle in the Kobuk Valley.

Although I obviously get a lot of personal pleasure out of traveling around the District to fascinating places like Alaska, I'm also here for important official reasons. One of the great strengths of the Federal Reserve is its connection to the citizenry of the country. In this respect, the twelve Reserve Banks play a particularly important role. Through our directors, our advisory councils, and through meetings like this one, we can get some insight into the public's viewpoint on issues that are vital to the conduct of monetary policy—issues like labor market conditions, expectations about inflation, and industry-specific developments, to name just a few. So I'm very much looking forward to the question and answer session that will follow my remarks, because I'm sure that I'm going to learn from you as much as you're going to learn from me!

This afternoon I plan to talk about the outlook for the U.S. economy and the prospects for monetary policy, concentrating on several important factors shaping that outlook. Before I begin my formal remarks, I would like to note that my comments represent my own views and not necessarily those of my colleagues in the Federal Reserve System.

As many of you probably know, the Federal Open Market Committee last met on June 27 and 28 and voted to hold the federal funds rate, our main policy tool, unchanged at 5¼ percent. To most observers of the Fed, the decision probably had a familiar ring to it, because the funds rate has been kept at that level for the last twelve months. Indeed, my views concerning the logic of this decision will also have a familiar ring to anyone who has heard me discuss monetary policy during the past year. To my mind, the reason for adopting and maintaining the current stance of policy is that it promises to keep the overall economy on an adjustment path where growth is moderate and sustainable. The virtues of this path are that it avoids exposing the economy to unnecessary risk of a downturn, while, at the same time, it is likely to produce enough slack in goods and labor markets to relieve inflationary pressures. I believed a year ago, and still believe now, that such a path is likely and will enable us to achieve our dual mandate—low and stable inflation and maximum sustainable employment.

Although the federal funds rate, has remained unchanged for the past year, a number of developments over that time have warranted our close attention as well as our deliberate consideration about the appropriate policy response. I plan to focus on several of these developments today, and, in particular, the risks they may still pose in diverting us from the desired path.

One issue concerns the possibility and potential consequences of a shift in financial conditions that could adversely affect economic activity: I'm thinking in particular about a possible shift in risk perceptions. There are now numerous indications that the premiums in financial returns that compensate investors for risk are notably low. One indication is the low level of long-term bond rates compared with expected future rates on short-term debt—in other words, an unusually low term premium.[1] Similar indications can be found in a variety of places, including narrow spreads for credit risk on an array of assets including, with some notable exceptions, corporate debt, commercial real estate, and residential mortgages.

One reason that risk premiums may be low is precisely *because* the environment is less risky: the volatility of output and inflation has declined substantially in most industrial countries since the mid-1980s, and a number of financial developments

[1] See also Eric Swanson, "What We Do and Don't Know about the Term Premium," *FRBSF Economic Letter*, forthcoming.

associated with technological change and deregulation have reduced transactions costs, diversified and expanded the variety of credit providers, and fostered the creation of new instruments for efficiently allocating and pricing risk. In addition, the health of corporate balance sheets has improved dramatically, and household delinquency rates, including those on residential mortgages, have generally been quite modest.

At the same time, however, the concern has been expressed that some investors may be underestimating risks.[2] For example, the rapid rise of lending at variable rates in the subprime mortgage market may have reflected an unduly sanguine view of the underlying risks; as we have seen, some households, large mortgage lenders, and hedge funds have felt the pinch of the problems in this market.

The low long-term rates and low risk premiums that have prevailed in financial markets over the last several years mean that overall financial conditions have been notably more accommodative than suggested by the current level of the real federal funds rate. Given that, a shift in risk perceptions would tend to push longer-term rates and credit spreads up, restraining demand.[3]

In fact, we have seen developments that might suggest to some that such a change may be starting. For example, in response to the problems in the subprime variable rate mortgage market, rates on certain default derivatives linked to those instruments have

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[2] There is some research into why risk might be underpriced, but so far, the answers remain tentative. Some have pointed to the greater role of investment managers in this more deregulated, competitive environment. These managers may have incentives to herd with other investment managers in order not to underperform their peers, and they may also have incentives to take more "tail" risks, in cases where compensation is weighted more towards achieving positive returns, without sufficient regard for low probability negative returns.

[3] See Glenn Rudebusch, Brian Sack, and Eric Swanson. 2007. "Macroeconomic Implications of Changes in the Term Premium," Federal Reserve Bank of St. Louis, *Review*, July/August, 89(4), pp. 241-269.

recently moved up substantially. In addition, there has recently been some tightening of lending standards and higher pricing of debt being issued in connection with private-equity financed leveraged buyouts. These recent reassessments of risk premiums seem to represent the market's appropriate response to the discovery of a higher probability of specific adverse events. Nonetheless, I also believe such developments are worth watching with some care, since there is always the possibility that they do presage a more general and pronounced shift in risk perceptions.

A particularly noteworthy development is the recent jump in intermediate and long-term interest rates. By mid-June, the nominal yields on five- and ten-year Treasuries had shot up by nearly 50 basis points above their May averages, and the conventional mortgage rate rose by nearly 35 basis points. Based on evidence from Treasury Inflation Protected Securities, the bulk of these increases was accounted for by real yields, while a smaller share was due to compensation for inflation.

But I would not say that these increases in long-term rates necessarily reflect a significant shift in risk perception. Rather, I would point to the fact that they coincided with a sharp upward shift in the expected funds rate path, as suggested by the futures market. This upward shift followed many months during which markets anticipated that the economy would weaken and that the Fed would respond by *cutting* interest rates fairly substantially. This view prevailed for some time, even though the FOMC's policy statements have continually emphasized that its predominant concern was the possibility that inflation would not moderate as expected. So I suspect that the markets and the Committee have become more closely aligned, sharing the view that growth in the U.S. is, and is likely to remain, healthy. In further support of this view, stock market values have risen and implied volatilities have been flat or trended down, as we continue to get stronger news on overall economic growth. Moreover, these developments—robust economic data, rising long-term rates, higher expected policy paths and climbing stock market indexes—are global phenomena, occurring in many industrialized countries.

Insofar as the rise in longer-term rates seems to be a response to favorable economic conditions—developments that have been part of my own forecast for some time—it has not had a big effect on my overall assessment of the economic outlook. For the very same reason, this rise in longer-term rates does not quell my concerns about a reversal in risk perceptions, a possibility which itself could pose a downside threat to the global economy.

With that perspective on recent financial developments in mind, let me now turn to an explicit discussion of the U.S. economy and the outlook for growth and inflation. Beginning in the second quarter of 2006, real GDP growth moderated noticeably, registering 2 to 2½ percent rates in the final three quarters of 2006, somewhat below most estimates of the economy's potential growth rate. Growth in the first quarter of 2007 was notably weaker, but a good part of that was due to the temporary effects of business inventories and net exports. Based on partial monthly data, it seems likely that there was a bounce-back in the second quarter, with growth averaging a modest rate for the first half of the year as a whole. My expectation is for moderate growth during the remainder of this year and in 2008.

I'd like to highlight developments in three sectors that will have an important influence on whether this forecast proves accurate. Two of them—personal consumption expenditures and exports—have been quite robust but are expected to slow moderately.

The third is residential investment, which has been quite weak, but it is expected to have a much less negative impact on overall activity going forward. Thus, overall real GDP in the coming period will depend importantly on how the cross-currents among these three sectors play out.

Personal consumption expenditures have been the main engine of growth in recent years; indeed, with employment growth strong and equity and housing wealth rising, American consumers outspent their earnings, and that resulted in a personal saving rate that has been in negative territory since early 2005. Going forward, at least some of the growth in consumption can be expected to diminish for a couple of reasons. First, increases in housing wealth have slowed dramatically. Second, energy prices have moved back up this year. For example, after falling through the latter half of last year, the price of West Texas Intermediate rose sharply during the first half of this year. It averaged \$67.50 in June, up from \$54.20 in January; and with gasoline margins moving up over this period, the retail price of gasoline has moved up even more. Such increases act like a tax on consumers, often leading to reduced spending. Of course, here in Alaska, their impact has been largely beneficial. As you know, high oil prices bring substantial income into the state, and, no doubt, this has helped to keep employment and personal income growing at a healthy clip.

Another source of strength in recent years has been the very strong world economy. Foreign real GDP—weighted by U.S. export shares—advanced at robust rates of 3¾ to 4 percent in 2004 through 2006, and this growth has been 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 those three years. Partly for this reason, U.S. net exports, which consistently weighed growth down from 2000 to 2005, actually gave it a lift during 2006. Assuming a modest deceleration in world economic activity, net exports seem likely to "turn neutral"—neither retarding nor stimulating growth in the year or so ahead.

Of course, a big drag on growth over the past year has come from residential construction. Housing is likely to remain an important source of weakness, so let me take a few moments to discuss it in detail. The cooling in the housing sector has, of course, been in part a response to a rise in financing costs. Interest rates on variable-rate mortgages have risen in recent years along with other short-term rates. However, until a few weeks ago, traditional fixed mortgage rates were actually down somewhat from their level at the beginning of the Fed rate tightening in mid-2004. With the recent increases, these rates now also are up. I should note that higher borrowing costs are not the only explanation for the recent cooling; it's likely that it also reflects a necessary correction in house prices after years of phenomenal run-ups that ultimately have proved to be unsustainable.

Since the end of 2005, activity in this sector has contracted substantially. Indeed, over the past four quarters, the level of residential investment spending declined more than 16 percent in real terms. And during that period, this sector—which represents only a little more than 5 percent of U.S. GDP—has taken a large toll on overall activity, subtracting a full percentage point from real GDP growth.

The more forward-looking indicators of conditions in housing markets have been mixed recently. Housing permits and sales have been weak. House prices at the national level either have continued to appreciate, though at a much more moderate rate than before, or have fallen moderately, depending on the price index one considers. Looking ahead, futures markets are expecting small price declines in a number of metropolitan areas this year. Finally, and importantly, inventories of unsold new homes remain at very high levels, and these most likely will need to be worked off before we see a rebound in housing construction.

The prospects for the housing market may also be affected by developments in the subprime mortgage market. I should note that the Fed pays close attention to these developments, not only because of their potential impact on the economy, but also because of our roles in bank supervision and regulation and in consumer protection.

From the standpoint of monetary policy, I do not consider it very likely that developments relating to subprime mortgages will have a big effect on overall U.S. economic performance, although they do add to downside risk. The types of subprime loans of greatest concern are variable-rate mortgages. Delinquency rates on these loans have risen sharply since the middle of last year—they are now nearly 12 percent—and there are indications that lenders are tightening credit standards for these borrowers. Looking more broadly across all types of mortgages, however, delinquency rates have remained low; this includes prime borrowers with fixed-rate *and* variable rate mortgages and even *subprime* borrowers with fixed-rate loans. Tighter credit to the subprime sector and foreclosures on existing properties have the potential to deepen the housing downturn. I am nonetheless optimistic that spillovers from this sector will be limited, because these mortgages represent only a small part of the overall outstanding mortgage stock.

Housing markets in Alaska have not been immune to the slowdown observed nationwide, but, in part because of high oil prices, economic conditions here have been healthy and this has limited the intensity of the downturn in housing. In 2006 as a whole, sales of existing homes rose in Alaska while they were falling nationwide. However, the pace of sales here actually fell in the second half of last year and early this year, and the pace of home price appreciation has slowed substantially since 2005. Nevertheless, in a departure from the longer-term trend, the rate of appreciation here has been above the U.S. pace for the past couple of years.

The relatively consistent performance in Alaska's housing market thus far has helped the state to avoid significant problems with respect to mortgage financing and payments. As in the nation as a whole, default and delinquency rates overall have remained low at least though early 2007. Delinquencies on adjustable-rate mortgages in the prime as well as the sub-prime market have increased somewhat in Alaska over the past year or two, but these increases have not been sufficiently large or widespread to significantly undermine mortgage credit conditions on net.

The bottom line for housing from a national perspective is that it has had a significant depressing effect on real GDP growth over the past year. While I wouldn't want to bet on a sizable upswing, I also wouldn't be surprised to see it begin to stabilize late this year or next. Furthermore, if and when it does stabilize, it could contribute to a pickup in overall growth in the future, as the negative force of its contraction turns neutral.

To sum up the story on output, real GDP appears to have advanced at a modest rate in the first half of this year. My best guess is that the pace will pick up a bit in 2007 to a rate just below potential, as housing's negative effect eases up enough to offset the expected modest slowdowns in consumption and exports. As I've indicated, these crosscurrents may play out in unexpected ways, entailing both upside and downside risks, and they will bear careful watching.

Indeed, careful watching will be required even if the scenario for economic activity that I see as the best guess and the best hope comes through. The reason is that a key part of the desired adjustment path would involve the emergence of enough slack in labor markets to counteract inflationary pressures. The latest labor market data show payroll employment growing steadily and at a robust pace. Moreover, the unemployment rate has, somewhat surprisingly, declined by half a percentage point over the past two years and now stands at 4½ percent; that rate may represent a degree of tightness in the labor market. If labor markets are indeed on the tight side, and if they remain there, then there may be reason for concern about the risk of building inflationary pressures.

This situation highlights a puzzle I have discussed before: Why has the labor market continued to be so strong, even while economic activity has moderated? Let me briefly outline some possible explanations, beginning with the more worrisome ones. One such explanation is that goods markets could be stronger than we think. This is a possibility because an alternative measure of real activity—real income—is considerably stronger than our standard measure of real GDP—which we normally measure on the output side. So, it's possible, but by no means certain, that real GDP could be revised up in future benchmark revisions, meaning that *both* labor and product markets actually might contain inflationary pressures at present.

Second, a number of experts are now arguing that trend productivity growth may have slowed a bit recently,[4] which might mean that the growth of potential output is lower than commonly assumed. Indeed, productivity has been surprisingly weak over the past year. Of course, discerning the extent to which this development reflects a short-lived, cyclical phenomenon, a downshift in the trend rate or both, is neither obvious nor straightforward. Those who believe that trend productivity growth has slowed a bit point to the slowdown in the first half of this decade in both the pace of productivity growth in the IT sector and the pace of investment in equipment and software, two factors that drove the productivity boom that began in the mid-1990s.

Although this argument may well be correct, it seems likely to me that the recent decline in the productivity data mainly reflects cyclical factors; in other words, it is likely due to labor hoarding and lags in the adjustment of employment to output—common phenomena in periods when economic activity decelerates. Interestingly, most of the recent slowdown in labor productivity growth can be accounted for by such lags in just one sector—residential construction. Although this sector has experienced huge drops in spending, employment has been remarkably well sustained. Going forward, as the adjustment lags work themselves out, residential construction employment may post significant declines and productivity in that sector and the economy as a whole may

[4] Stephen D. Oliner, Daniel E. Sichel, and Kevin J. Stiroh, "Explaining a Productive Decade," *Brookings Papers on Economic Activity* (March 29-30, 2007) http://www.brookings.edu/es/commentary/journals/bpea_macro/forum/200703oliner.pdf; Dale W. Jorgenson, Mun S. Ho, and Kevin J. Stiroh, "A Retrospective Look at the U.S. Productivity Growth Resurgence," unpublished paper, 2007; John Fernald, David Thipphavong, and Bharat Trehan, "Will Fast Productivity Growth Persist?" *FRBSF Economic Letter*, 2007-09, http://www.frbsf.org/publications/economics/letter/2007/el2007-09.html.

rebound. The possibility of long lags in the adjustment of employment to economic activity is a benign explanation for the puzzle.

Another benign possibility is that labor markets may not actually be particularly tight. There are a variety of ways to estimate conditions in the labor market, and some of these don't suggest much in the way of inflationary pressures. For example, the Conference Board index of job market perceptions, which is based on a survey of households, suggests that labor markets are only very slightly on the tight side. Moreover, if labor markets were tight, this could be expected to show up in robust growth of labor compensation. Instead, some of the data present a different picture: for example, the employment cost index shows remarkably restrained increases of only a little more than 3 percent over the past year.

At this point, I am not inclined to discount heavily these benign explanations. Looking at the price inflation data over the past year or so, signs of improvement are evident. Over the past twelve months, our main measure of consumer inflation—the price index for personal consumption expenditures excluding food and energy, or the core PCE price index—has increased by just under 2 percent. Just a few months ago, the twelve-month change was quite a bit higher, at nearly 2½ percent.

Moreover, I expect to see some further improvement in core inflation over the next year or two. First, this should occur as the economy develops some slack in response to real growth that is modestly below the potential rate. Second, inflation may have been elevated partly because of some transitory factors that may unwind over the next year or so. One of those transitory factors is oil prices. Although core inflation, by definition, excludes energy prices, they still may affect it to the extent that they are passed through to the prices of other goods and services. While oil prices have risen recently, they are still below their peaks of mid-2006. Over the two and a half years before that, energy prices more than doubled, and this probably put some upward pressure on core inflation. However, the effects of energy price changes on inflation are inherently temporary, and these upward pressures are likely to dissipate in 2007, even if energy prices remain at their current levels.

Another transitory factor is upward pressures on rents, including imputed rents on owner-occupied housing that enter importantly into the calculation of the price of housing services and, therefore, consumer inflation. Over the last year, rents have been rising at an unusually rapid rate. But if rents adjust to more normal levels relative to house prices, these increases will taper off, also damping inflation.

That said, the risks to inflation are also significant. One I have already mentioned is the possibility that structural productivity growth has slowed, which could add to cost pressures. While cyclical swings in productivity are not generally passed on to product prices, a decline in structural productivity growth might escalate inflation pressures. Another risk is possible slippage in the market's perception of our inflation objective. Although inflation compensation over the next five years, as measured in Treasury markets, has been essentially unchanged recently, longer-run inflation compensation rose modestly, along with the rise in long-term rates that I discussed earlier. My guess is that this increase largely reflects an elevation in inflation risk premiums or the influence of some idiosyncratic factors affecting the demand for Treasury debt, rather than an increase in long-run inflation expectations. I base this conclusion on the fact that longer-run inflation compensation also ticked up in the United Kingdom, a country where inflation expectations have been remarkably well anchored over the past decade and where inflation has been trending downward. The fact that longer-run inflation compensation rose in both countries, despite their different monetary policy regimes, suggests that a common explanation is needed, rather than one specific to the U.S. This result suggests that inflation expectations in the U.S. continue to be well anchored as they have been for at least the past ten years or so, as the Fed has established its credibility with the public about both its commitment to and its competence in keeping inflation at low and stable rates.[5]

Turning to monetary policy, I hope I've made it clear that—based on what we know now—I think the current stance of policy is likely to foster sustainable growth with a gradual ebbing of inflationary pressures. It has been heartening to see core consumer inflation edging down in recent months. However, as the most recent statement noted, "a sustained moderation in inflation pressures has yet to be convincingly demonstrated." Moreover, upside risks to inflation continue to be present, given the possibility that labor markets are somewhat tight. I believe it is important to be particularly attentive to these risks not only because price stability is desirable in its own right, but also because a credible commitment to keeping inflation low and stable is necessary to ensure that inflation expectations remain well-anchored. At the same time, we must be careful not to pose unnecessary risks to continued expansion.

An "asymmetric policy tilt" seems appropriate given the upside risks to inflation. However, it is also essential that policy retain considerable flexibility in responding to

[5] See Bharat Trehan and Jason Tjosvold, "Inflation Targets and Inflation Expectations: Some Evidence from the Recent Oil Shocks," *FRBSF Economic Letter*, 2006-22, September 1, 2006. For a discussion of related issues, see John Williams, "Inflation Persistence in an Era of Well-Anchored Inflation Expectations," *FRBSF Economic Letter*, 2006-27, October 13, 2006.

emerging data. Last week's FOMC statement thus continued to emphasize that "Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information."

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