

TSINGHUA UNIVERSITY

Beijing, China  
March 26, 2007

.....

**The Making of Monetary Policy in the U.S. and the U.S. Economic Outlook**

Thank you very much for inviting me to be here and speak to you today. As you mentioned, I am president of the Federal Reserve Bank of Chicago, which is part of the Federal Reserve System. In other words, I'm a central banker. Central banks perform a very important role in all economies. Regardless of the structure of the central bank, its most important function is to control the money supply—that is, the supply of currency and credit in the economy.

The Federal Reserve performs this function under a legislative mandate to foster monetary and financial conditions that help support sustainable economic growth with low and stable inflation. We accomplish this by setting targets for short-term interest rates—specifically, the overnight lending rate banks charge each other to borrow reserves. This is known as the federal funds rate.

Setting the correct target is the key. It must be set to provide enough liquidity for saving and investment. This helps our economy achieve its maximum sustainable growth rate. But there are risks if too much liquidity is created. Too much liquidity means that spending may rise to the point that aggregate demand strains the productive capacity of the economy, increasing the costs of production. This in turn can lead to increases in the prices firms charge for finished goods, generating a spurt of inflation. And if households and businesses begin to expect wages and prices to rise, then inflation can be persistently higher.

Persistent inflation is costly because it prevents prices from guiding the efficient allocation of resources. When these signals are clear, households and businesses do not waste time and resources trying to avoid having inflation eat away at the purchasing power of their income and savings. So it is important that the prices of goods and services in a market economy are stable and believed likely to remain so.

In addition to monetary policy, the Federal Reserve performs other duties to help achieve our broad mandate of supporting a safe and efficient monetary and financial system. In our market economy, we rely on private banking and financial markets to mobilize and channel savings to productive investments. So we promote public confidence in this system and improve its efficiency through bank supervision and by our active involvement in the operation of our nation's payments system. In our role as a supervisor, we try to identify whether banks have taken on excessive risk without the appropriate internal controls or are undercapitalized. If so, we direct them to take corrective actions. That's not to say that we prevent commercial banks from failing—we do not provide institutions with capital, and if the corrective actions are unsuccessful, the bank could fail. But by promoting sound practices, supervision supports financial stability and allows financial market participants to be more confident of their counterparties' abilities to execute transactions. This enhances the ability of the market to efficiently allocate credit among all participants.

Also, we have responsibility for insuring that the payments system operates efficiently and effectively. In this regard, we sell financial services like payments processing to commercial banks. Our role in the payments system has helped us meet financial challenges, such as providing liquidity following the tragic terrorist attacks on September 11. Plus, we reach out to the community to promote development, fair access to financial services, financial education and literacy, and research related to consumer issues in order to further support our economic growth objectives.

It's important to note that, when setting monetary policy, we do not try to target a particular growth rate for the real economy. In the long run, the economy's real performance is determined by such factors as population growth, labor force participation, capital accumulation, the skill of its workers, and improvements in technology. But macroeconomic stability requires sound financial conditions to support the economy's long-run growth prospects, which our monetary policy attempts to accomplish. When we are successful, inflation and long-term interest rates are kept in check, assisting the economy to grow at its potential, or its long-run sustainable rate of growth.

Of course, the art of monetary policy is difficult to master, and what we do today reflects the lessons we have learned through the years. In fact, the Federal Reserve is not even our first attempt at a central bank. It was created in 1913 after 77 years of having no central bank. Our first two attempts, the First and Second Banks of the United States, were created to help finance the federal debt incurred from fighting our War of Independence and the War of 1812. The charter for the Second Bank expired in 1836 and was not renewed. But during the late 19th and early 20th centuries, our nation suffered several financial panics, and so we realized that we needed to make a third attempt at establishing a central bank.

What we have now is a unique American institution, improved with the lessons learned from the first two attempts at a central bank. The Federal Reserve System is a central bank with a regional structure. The Federal Reserve Act of 1913 established 12 regional Reserve Banks and a Board of Governors in Washington, D.C. This represents a compromise between having a public, central authority in the Federal Reserve Board in D.C. and the regional and private-sector representation through the 12 quasi-private (though publicly chartered) regional Reserve Banks.

The Federal Reserve Bank of Chicago serves the Seventh Federal Reserve District, which is located in the Midwest. The Chicago Fed [which is what we call the Federal Reserve Bank of Chicago for short], like each of the district reserve banks, is overseen by a Board of Directors who are private cit-

izens from banking, business, and the community at large and come from around the district. My district is heavily involved in manufacturing, which makes the region's economy more cyclical than in other regions. I'd also like to note that Chicago is in the process of bidding to host the 2016 Summer Olympic Games, and it's great to see the excitement and anticipation here for Beijing 2008—I certainly hope that Chicago has this type of experience.

As part of the Federal Reserve System, the individual Federal Reserve District Banks, including the Chicago Fed, help set monetary policy nationwide. As president of the Federal Reserve Bank of Chicago, I serve on the Fed's key policymaking group, the Federal Open Market Committee, or FOMC, until last year chaired by Alan Greenspan and now chaired by Ben Bernanke. All of the presidents of the regional Reserve Banks participate in the FOMC's discussions—though only 5 of 12 are voting members, on a rotating basis—as do the 7 members of the Federal Reserve Board of Governors. After the FOMC sets a target federal funds rate, the Federal Reserve Bank of New York then implements this monetary policy decision through the use of “open market operations,” which involve the buying and selling of U.S. government securities. Although the Fed affects the supply of credit to banks through the targeting of the federal funds rate, it relies on private market participants to then allocate this credit throughout the financial system. Importantly, we do not loan directly to businesses and households, and we do not instruct banks or other financial intermediaries who to lend to or how much to charge on their loans. They make those decisions on their own—we rely on a competitive financial system to ensure that credit gets allocated efficiently.

The preparations for each FOMC meeting, like the one we had last week, are extensive. The first step in preparation is gathering nonquantitative and anecdotal information about the economy from a wide network of business and other contacts throughout the region. They provide real-time insights on current and future trends in a wide range of economic indicators—they give us a perspective beyond the numbers. Of course, we study the published data carefully, and economists at the district banks and in Washington, D.C., produce national economic forecasts for the FOMC participants.

At each FOMC meeting, Committee members discuss the outlook and debate policy options for the national economy. Each bank president gives a statement on economic conditions in their region and in the nation as a whole, and the members of the Board of Governors offer their outlook for the national economy. The Committee then openly discusses the policy options and decides where to set its target for the federal funds rate. When we vote, the District bank presidents decide on the policy that is best for the country as a whole. The United States has a single currency and our financial markets are fluid and highly integrated. So, we must have one monetary policy for the nation and it cannot be used to benefit one region over another.

Also, not through any specific policy or initiative, but perhaps just by its culture, the Fed has always placed a premium on uniting around the consensus policy action. While some in the FOMC might have expressed a different opinion from the consensus during the policy discussion, most of our votes are unanimous. At other central banks, such as the Bank of England, dissent is much more common, and 5 to 4 votes are not out of the ordinary.

The FOMC also places a great deal of importance in how it communicates its monetary policy decisions. It wasn't until 1994, shortly before I joined the Chicago Fed, that the FOMC began issuing statements after its meetings to announce its policy decisions. Over time, this statement has evolved into a fuller discussion of the FOMC's evaluation of economic conditions. In 2005, the FOMC took

the additional step of releasing the minutes to its meetings in a more timely fashion. So we now give the public a much better idea of the systematic ways in which the FOMC makes judgments regarding economic developments and translates these into the course for monetary policy. When the public and financial markets have a clear understanding of the Fed's goals and the methods used to achieve those goals, consumers and businesses can better plan for future activities.

It's also important to note that the Fed is independent of political and other influences. So we have an obligation to keep the public well-informed about our objectives and policy actions.

As I mentioned earlier, we have two goals for monetary policy: first, to foster financial conditions that help the overall economy expand at its maximum sustainable pace; and second, to maintain price stability, or low and stable inflation. For the rest of my time today, I'd like to give you my thoughts on the U.S. economic outlook and some risks to that outlook in relation to our policy goals.

In order to see where the economy is heading, it's important to look back on where it's been. The U.S. economy experienced a mild recession in 2001. In the years after the 2001 recession, the economy grew faster than its long-run average rate of growth, which is typical following a recession. And there was a natural slowing from that faster pace after the bulk of our productive resources that were underutilized following the recession were back at work. More recently, however, the economy weathered some periods of uneven growth and a sharp decline in housing activity. Real gross domestic product, or real GDP—our broadest measure of economic output—increased 3.1 percent last year. Many economists estimate that the economy's potential growth rate—which is a term that we use to mean the rate of growth it can sustain over time, without generating inflationary pressures, given its labor and capital resources—is close to 3 percent. So, on average, the economy expanded near its potential in 2006. However, growth was stronger early in the year and below potential in the second half. Meanwhile, throughout the year firms were hiring workers at an impressive pace, and labor markets continued to tighten; the unemployment rate fell to 4½ percent in the fourth quarter, down from 5 percent at the end of the previous year.

Such tightening resource pressures, as well as high energy and commodity prices, likely contributed to faster increases in prices. As a result, inflation ran too high. In 2006, the Fed's preferred measure of inflation increased 2.3 percent, up a bit from 2.1 percent in 2005. By contrast, I prefer inflation to be between 1 and 2 percent—that's the range that I consider to be most compatible with the Fed's goal of price stability. The monthly inflation numbers did come in lower toward the end of the year, and I was pleased to see the improvement. But the most recent couple of readings on inflation have been higher. So clearly, it is much too early to say that inflation is no longer a concern.

For the rest of 2007, I expect the economy to expand at a rate modestly below its long-run potential, and in 2008, at a pace nearer to potential. The brief period of below-potential growth would be consistent with slight increases in the unemployment rate and other measures of resource slack. But the magnitude of the increases would likely be small. Indeed, the FOMC forecasts an unemployment rate of 4½ to 4¾ percent through 2007 and 2008, which would represent little change from its current value.

Among the greatest risks to this outlook for growth are continued declines in housing. Last year, home sales fell sharply and fewer new homes were built. Residential investment fell 12.6 percent,

reducing GDP growth by  $\frac{3}{4}$  of a percentage point. A key question for the outlook is: What will be the full extent of the housing slowdown?

The most recent data on housing have been mixed and downside risks remain. The data on housing starts and sales suggest some stabilization, though the adjustment still appears to be ongoing. Indeed, while home builders we talk to report some tentative signs of markets stabilizing, the progress is uneven. So we are uncertain about what we will see in the housing data over the next several months. There are also financial risks associated with the declines in housing markets. For instance, delinquencies are up in the U.S. market for subprime home loans. This could become an issue for the macro outlook if these troubles spilled over to the availability of credit in markets more generally. We don't see this happening yet, however.

That said, the longer-term fundamentals for housing in the U.S. remain positive. The same factors that supported the housing boom—strong productivity trends and low borrowing rates relative to historical norms—are still in place. These factors likely put a floor under how far housing will decline. So I think home building will stabilize as we move through the year, but I don't expect to see any noticeable increases, either.

There has also been a concern that the slowdown in housing could spill over into other sectors of the economy, most importantly to consumer spending. Despite these worries, consumer spending has held up well; it grew 3.6 percent in 2006, which is a robust pace by historical standards.

Looking to 2007, consumer spending should continue to be supported by vibrant labor markets, lower energy prices, and solid productivity trends. Importantly, the trends in worker productivity, or output per hour of work, are solid, and they eventually show through to increases in wages, salaries, and benefits. Solid gains in productivity should continue, as technology advances further, workers become more skilled in using technology, and managers find new ways to apply technology to their businesses. However, slower house price appreciation and the past increases in interest rates should boost savings and lower consumption relative to income. Balancing all of these forces, I think we will see solid growth in consumption in line with longer-run trends.

Recently, we have seen some softer data on capital spending by businesses. The same positive productivity trends that we expect to support consumption should also support business spending on plant and equipment. So we are expecting the recent softness to be temporary. Still, we are monitoring developments in investment closely.

Turning to inflation, there is a risk that inflation will stay stubbornly high. First, the economy appears to be operating in the neighborhood of its potential level of output. In this environment, tight labor markets could generate additional cost pressures. That said, profit margins are relatively high, so some further increases in labor costs could be absorbed by businesses in the form of lower margins.

Second, inflation has run above 2 percent for the past three years. With inflation at such high levels for so long, we have to recognize the risk that inflation expectations could become stuck in a range that would not be conducive to price stability. If firms and workers expect inflation to be high, they will want to keep up with the general increase in prices and costs. As a result, they will set higher prices and wages or build in plans for automatic increases. In this way, higher inflation expectations

can become self-fulfilling. That is, they can lead to a persistently higher inflation rate, instead of simply a temporary increase. To date, inflation expectations appear to be contained. Nonetheless, the longer inflation runs above levels consistent with effective price stability, the greater the danger that expectations of future inflation will settle in above those levels as well.

Taking all of these factors into account, my assessment is that the risk of inflation remaining too high is greater than the risk of growth falling too low. Of course, whether policy will need to be adjusted and the degree of any adjustment will depend on the data we see in the months to come and how that data influences our forecast of the economy.

Looking ahead, I am optimistic about the fundamentals of the U.S. economy. We believe in free markets and competition, the use of technology and innovation, and openness to trade. These core principles provide a solid foundation for our economy to weather short-term challenges and expand over time. And the Federal Reserve's commitment to price stability means that we will be achieving this in an environment of low and stable inflation.