Tonight, I stand before you as an energy consumer. As a consumer, I tend to think of an increase in oil prices as a bad thing. But I always try to remind myself when giving a speech in Oklahoma that there may be those in the audience who have a different perspective. I will try to be open-minded and politically correct tonight, but I live in an old house with an inefficient gas boiler, so when I hear that natural gas bills are projected to be 70 percent higher this winter, my open-mindedness can only go so far. But at least, I have warned you where I am coming from.

Seriously, though, the sharp increase in energy prices this year is one of the key issues facing U.S. monetary policymakers. Hurricanes Katrina and Rita aggravated an already tight energy situation while adding a new set of economic uncertainties. The hurricanes produced a tragic loss of human life and property, disrupted normal productive activities along the Gulf Coast, and interrupted important transportation links. Higher energy prices and the economic effects of the hurricanes are, thus, the two key issues that I will emphasize tonight, although there are certainly other issues that would deserve discussion if we had more time.

I will begin with a brief review of economic conditions before the hurricanes and then discuss some of the uncertainties created by Katrina and Rita. The United States has a flexible and resilient economy, and I believe the outlook for U.S. economic performance remains favorable. But as the negative effects of the hurricanes wane and rebuilding adds some positive economic momentum, energy price pressures are likely to
remain an economic risk. So I will close by discussing the challenges that higher energy prices pose for Federal Reserve policymakers.

Recent conditions

Let me begin by reviewing how our economy was performing prior to Hurricane Katrina. Over the first half of this year, real output of goods and services grew at a solid 3.5 percent rate, which is down slightly from last year’s pace. Moreover, the expansion was broad-based. Consumer spending rose at about the same pace as overall GDP, while business fixed investment grew faster. And of course, low mortgage rates contributed to the boom in the housing market, with new home construction rising at a 10 percent rate over the first half of this year.

One sector that has typically been a drag on economic growth is international trade. Our nation’s trade deficit was about $634 billion at the end of 2004. Reflecting past depreciation of the dollar and somewhat better growth abroad, that deficit actually improved by $23 billion over the first half of this year, but the deficit is still 5 ½ percent of GDP, a large figure by historical standards.  

With a solid expansion under way, businesses are more confident about hiring new workers. So far this year, payroll employment gains have averaged about 194 thousand new jobs per month, somewhat stronger than last year. These solid employment gains lowered the unemployment rate to 4.9 percent in August. That’s down

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1 Real GDP grew 3.8 percent in 2004 on a Q4/Q4 basis. Over the first half of 2005, consumption grew at a 3.3 percent rate, nonresidential fixed investment at a 7.0 percent rate, residential fixed investment at a 9.6 percent rate, and government spending at a 2.3 percent rate.

2 Over the first half of 2005, exports grew at a 10.3 percent rate, while imports expanded at only a 3.9 percent rate. In contrast, imports grew faster than exports in 2004.

3 Payroll employment grew by 183 thousand jobs per month in 2004.
0.5 percentage point from a year ago, near what some economists think is the full employment rate.

Despite sharp gains in energy prices, consumer price inflation remains fairly moderate. The overall CPI rose 3.6 percent over the last 12 months, reflecting large gains in energy prices. But for the most part, higher energy prices have not spilled over to the prices of other goods and services, although such cost pressures deserve close monitoring. The core CPI, which excludes volatile food and energy prices, increased by a moderate 2.1 percent over the last 12 months. In addition, longer-term inflation expectations remain contained.4

Impact of the Hurricanes

It is fair to say, then, that before Hurricane Katrina, the economy was growing solidly and core inflation was moderate, although higher energy prices were putting some upward pressures on the CPI. How did the situation change when Katrina and Rita hit the Gulf region?

Hurricanes typically have a small, temporary effect—and sometimes even an undetectable effect—on national economic conditions. Economic activity is reduced in the short run as production and spending are temporarily disrupted. Our GDP accounts measure current production and spending, not national wealth, so the tragic losses of human lives and property do not show up fully as a deduction from GDP. Over time, the rebuilding effort gets under way, providing a small boost to measured GDP as homes are rebuilt or repaired and damaged personal property is replaced. Of course, similar rebuilding occurs in the business and government sectors.

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4 The energy component of the CPI climbed about 20 percent over the last 12 months. The core CPI rose only 0.1 percent in August, the fourth straight month at this low rate.
Although these same factors apply to Hurricanes Katrina and Rita, the effects are likely to be more severe and the uncertainties greater for two reasons. First, Katrina created larger economic losses than any previous hurricane. Recent estimates suggest that insured damages may run as high as $60 billion, which would be nearly three times the damage from Hurricane Andrew in 1992, and uninsured losses will be at least that large. Hurricane Rita inflicted smaller losses—current estimates are around $2 ½ to 6 billion of insured losses.

Second, the hurricanes damaged the Gulf Coast oil infrastructure at a time when energy supplies were already stretched thin. Just as refineries and pipelines were coming back on line after Katrina, Hurricane Rita forced another shutdown. The damage from Rita is still being assessed, and fortunately the worst-case scenario did not materialize. But it appears that it will take weeks or even months to get some important refineries and natural gas production back in service. Energy markets and government agencies are adjusting in various ways—reduced energy consumption, increased gasoline imports, changes in government fuel regulations, and tapping the strategic petroleum reserve. Prices for petroleum and petroleum products have thus come down since Hurricane Katrina hit, though prices are still much higher than a year ago.

Although uncertainties remain about how the hurricanes will affect the national economy, many business forecasters believe that the hurricanes will reduce economic growth by roughly 0.5 percentage point in the second half of this year. Consumer confidence dropped in September according to the two major surveys.\(^5\) Employment may have plunged in the September, as well, and inflation will be higher because of the

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\(^5\) The Conference Board index plunged 19 points in September, which was the sharpest decline in nearly 15 years. The preliminary value of the Michigan index fell 12 points in September.
increased energy prices. But with the economy growing solidly prior to the hurricanes, such a temporary negative shock is unlikely to derail the expansion. Large amounts of federal aid and the rebuilding effort should cushion the economic impact, and in 2006, rebuilding will likely strengthen real GDP growth by a few tenths of a percentage point.

**The Economic Outlook**

Although Hurricanes Katrina and Rita hurt economic growth in the near term and add to the uncertainties facing policymakers, we need to remember several positive factors in the current outlook. For example, monetary and financial conditions remain supportive of growth. Although the Federal Open Market Committee has been raising the federal funds rate, monetary policy has been accommodative over the past year. With the federal funds rate now at 3 ¾ percent, policy is closer to a neutral stance—some FOMC members, for example, believe the neutral funds rate is around 3 ½ to 4 ½ percent. But the federal funds rate is still near the low end of that range. Moreover, monetary policy operates with long lags so past ease may still be bolstering economic growth.

Another key factor is low long-term interest rates. Many observers have been surprised that long-term rates have remained this low during a period of strong growth and monetary tightening. Low long-term rates encourage business investment and have helped to sustain strong housing activity. Rising single-family home prices have boosted the net worth of many households. Over the last year, single-family home prices rose over 13 percent nationally, and 5.4 percent in Oklahoma.\(^6\) Admittedly, there is reason for

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\(^6\) The Office of Federal Housing Enterprise Oversight (OFHEO) reported single-family home prices rose 13.43 percent from 2004:Q2 to 2005:Q2. For comparison, prices rose 7.7 percent in Missouri and 5.5 percent in Kansas over that period, but the gains were 25.2 percent in California and 24.5 percent in Florida. The median price of existing homes rose 15.8 percent over the 12 months ending in August. The
concern about whether such strong gains in home prices can continue, but so far, rising
home equity has supported residential construction and other consumer spending.

Fiscal policy is becoming more stimulative as a result of the hurricanes. So far,
Congress has appropriated supplemental spending of about $62 billion to aid the victims
of Katrina. Joshua Bolten, director of the Office of Management and Budget, has
reportedly said that sum is enough to get us through the next few weeks, and that
additional federal appropriations will be needed. In addition to hurricane aid, the new
Medicare prescription drug benefit as well as defense and homeland security spending are
adding to federal outlays.

Reflecting such factors, the economy has enough momentum to withstand the
shocks from higher energy prices and the hurricanes. Our economy has proven to be
highly resilient through any number of past shocks—the Russian financial crisis, the
September 11 terrorist attacks, and past surges in energy prices, to name a few. I expect
that economic growth will be around 3 ½ percent for both 2005 and 2006. Such growth
would be slightly below last year’s pace and closer to the economy’s long-term trend.
Even with continued growth, the unemployment rate may increase somewhat in the near
term because of the hurricanes, but I expect the unemployment rate will edge back down
by next year.

With the economy operating close to potential, growth near the economy’s long-
term trend would be desirable in the future. Growth well above the long-term trend
might put upward pressure on inflation at a time when higher energy prices are already
straining consumer budgets. Recent readings on core inflation have been favorable, and I

median price of new homes rose only 1 percent over the last 12 months, and new home sales fell nearly 10
percent in August.
expect that we will see core CPI inflation around 2 ¼ percent going forward. But with excess capacity diminishing, energy prices rising, and the new uncertainties from Katrina and Rita, FOMC members will need to monitor inflationary pressures closely.

Impact of higher energy prices

What are the risks to sustainable growth and price stability going forward? A key risk is that sustained higher oil prices could lead to slower growth and an increase in inflation. This certainly was the pattern in the past when oil prices rose sharply. Every postwar slowdown was preceded by an increase in oil prices. Also, many analysts have attributed the inflation of the 1970’s and 1980’s to oil price increases. That’s not to say there haven’t been episodes where oil prices rose with few ill effects on the economy. But even a casual look at the past suggests we should carefully monitor oil market developments and their effects on the economy.

In the last year or two, many economists have substantially raised their forecasts for energy prices in the years ahead. The higher trajectory for oil prices reflects both demand and supply factors. On the demand side, energy demand is rising cyclically in the United States and other developed economies. In addition, Asian energy demand is expanding rapidly as this part of the world industrializes. Last year, global oil demand grew nearly 3 million barrels per day, with Asia accounting for half of that growth. This year, global demand is projected to grow 1.6 million barrels per day, a smaller gain because of the higher oil prices.

On the supply side, the lack of production capacity has contributed to the rise of oil prices. Spare oil production capacity is at its lowest point in 30 years, with almost all of that capacity in the volatile Persian Gulf region. With demand rising, any supply
disruption leaves very little spare capacity. When hurricanes interrupt production in the Gulf of Mexico or terrorists strike at oil facilities in Iraq, prices surge. In addition, the threat of future terrorist attacks has caused oil consumers and speculators to increase purchases of oil futures to ensure a steady supply, driving up the futures price of oil.

What are the effects of higher oil prices and how should monetary policy respond? For most of the country, oil prices act like a tax on businesses and consumers. Because consumers spend more of their disposable income on energy—particularly in filling up their gas tanks—they have less to spend on other goods and services. Businesses find their production and transportation costs increased and, therefore, tend to cut back on their output of goods and services. And since the United States is a net oil importer, there is no significant offset from increased spending by the oil producers who receive higher oil revenue. So the effect of higher oil prices is a slowdown in economic growth, often accompanied by a temporary rise in inflation.\footnote{If monetary policy responds in a way that moderates the adverse output effects without allowing a permanent increase in inflation, then standard macroeconomic models suggest that a permanent $10 per barrel increase in the price of oil leads to a slowdown in economic growth of about 0.4 percentage point over two years and a temporary increase in inflation of about the same amount.}

Monetary policymakers face a dilemma when confronted with high oil prices. An oil price shock tends to reduce output and increase the inflation rate. Monetary policymakers can lower the federal funds rate and stimulate spending to raise output, but that will tend to make the inflation worse. Or policymakers can raise the federal funds rate to combat the inflationary pressures from the oil price increase, but that will tend to weaken output even more. When there is an oil price shock, monetary policy is unable to fully offset both the inflation effects and the output effects of higher oil prices. But
economic theory and historical experience do give an important lesson. The most important thing monetary policymakers can do is ensure the temporary rise in inflation does not lead to higher inflation expectations and an associated permanent increase in the inflation rate.

Clearly, the recent increase in energy prices bears watching. As I noted earlier, every post-war recession has been associated with a surge in oil prices. That said, we have also experienced oil price increases with no clear adverse impact on the economy. What will be the impact of the current increase in oil prices? In my view, as long as oil prices do not move significantly higher and stay there, the likely effects of the recent increases are relatively modest. We’ll see lower output growth and higher inflation for a while, but the size of these effects should be relatively small. I have several reasons for thinking this.

First, the economy is fundamentally strong. We are in the expansion phase of the business cycle, and all sectors of the economy are expanding. In particular, we are seeing strong growth in business investment and impressive gains in productivity. Past accommodative monetary policy is still stimulating economic activity, and fiscal policy continues to give the economy a boost.

Second, the economy is more energy efficient than in the past. Energy consumption per dollar of GDP is only about half of what it was in 1960, and the trend remains gradually downward. Past increases in oil prices have led to more fuel efficient production and consumption, and the mix of economic activities has shifted away from energy-intensive manufacturing toward service industries and knowledge production.
Finally, policymakers have learned from the oil price shocks of the past. In the 1970’s, monetary policy was eased in the face of higher oil prices to lessen the decline in U.S. output. With inflation rising and the nominal federal funds rate falling, monetary conditions became very accommodative and inflation expectations rose sharply. We saw inflation increase to the double-digit range. Ridding the economy of that inflation was costly and took a long time. We do not want to repeat that experience. Monetary policy must be conducted so that long-run inflation expectations remain well anchored. The best way to ensure that is to conduct monetary policy with the goal of maintaining price stability over the long run.

Conclusion

In closing, let me repeat that the United States economy is very resilient, and it entered the second half of 2005 with considerable momentum. Shocks to the economy, such as the hurricane damage and the surge in energy prices, may temporarily raise consumer price inflation and lower growth. But in my view, underlying economic conditions remain fundamentally healthy. To preserve that health, monetary policymakers must make sure that long-term inflation expectations do not drift upward in response to higher energy prices or excessive growth in aggregate demand. In that sense, the FOMC’s past actions to remove monetary accommodation have been designed to maximize sustainable growth in the years ahead.