September 9, 2008

Hurricanes put energy on center stage

Hurricane season is in full swing here in the Southeastern United States. The Atlanta Fed pays particular attention to hurricanes for two reasons: (1) they have significant impacts on the local economies they strike, and (2) they can potentially have big impacts on the national economy.

For example, in 2005, even though the Katrina and Rita storm-damaged area of Louisiana represented only a small fraction of the nation's gross domestic product (GDP), it cast an outsized shadow because of its very large role in oil and gas production and processing. Katrina and Rita's disruptions of this production and processing spilled over into the national economy, destroying 113 offshore oil and gas platforms and damaging 457 oil and gas pipelines. This damage generated uncertainty about the availability and price of energy products, causing prices to immediately jump.

After relatively quiet hurricane seasons in 2006 and 2007, 2008's hurricane season thus far has been quite active, with potentially significant national implications. That's because the Gulf of Mexico remains a substantial source of oil and natural gas production—just as it was three years ago. In addition, coastal Louisiana is the home to upwards of 50 chemical plants, which produce 25 percent of the nation's chemicals that are used in a wide variety of products such as medicines, fertilizers, and plastics. Compounding the Gulf Coast's concentration of oil, gas and chemicals is the fact the U.S. economy is in a weaker state today and, as a result, more vulnerable to economic shocks than in 2005, a point made in a recent CNNMoney article about Hurricane Gustav.

One of the questions we are often asked is, "what is the effect of a hurricane on the economy?" Not surprisingly, the answer depends on what "the economy" refers to. From a national accounting perspective, GDP is a measure of the nation's *current* production of goods and services; thus GDP is not directly affected by the loss of property (structures and equipment) produced in previous periods.

However, there are usually second-round GDP effects that arise because of disruptions to production, income and consumption flows. The Bureau of Economic Analysis provides a good description. For example, in the short run after a hurricane, incomes in many industries are likely to decline because of cuts in production, while some industries involved in the cleanup and repair may see activity increase. Similarly, incomes and spending could increase in areas that are the recipients of evacuees. The net effect of these flow disruptions on GDP over time is often not large because lost output from destruction and displacement is offset by a big increase in reconstruction and public spending later.

But even if the effects are neutral on a national scale a storm's impact can be long-lasting in an affected locale. For instance, the flooding associated with Katrina left the economy of New Orleans devastated, and in many dimensions it has not fully recovered three years after the storm. Air traffic through New Orleans International Airport increased 13 percent in June 2008 compared to a year earlier but still remained well below pre-Katrina levels. Hurricane Gustav resulted in another evacuation of the city and the cancellation of numerous tourist and other events. Clearly storms like this have the potential to wreak havoc on the prosperity of the Crescent City.

The Atlanta Fed regularly reports on regional economic conditions on its public Web site. As part of its efforts to monitor storm effects—both local and national—the Atlanta Fed is also providing information on post-storm conditions in the affected areas. So far, these reports have focused on Hurricane Gustav's impact on key energy and transportation infrastructure. The Bank will provide similar updates on other storms, including Hurricane Ike, which had entered the Gulf of Mexico at the time of this posting.

By John Robertson and Mike Chriszt in the Atlanta Fed's research department

Note: Macroblog will not feature postings on monetary policy issues during the Federal Open Market Committee meeting blackout period, which runs from the week before the FOMC meeting until the Friday after it. Also, David Altig, senior vice president and research director of the Atlanta Fed, will not post during this time frame.

September 9, 2008 in Energy, Katrina | Permalink