

## *The Economy in Perspective*

*A low probability event moves center stage...* The Tuesday, August 30 New York Times carried the front-page headline, "Hurricane Slams into Gulf Coast... "New Orleans Escapes a Direct Hit." We now know that the optimistic reports were premature; New Orleans was later devastated when levees holding back floodwaters collapsed, releasing walls of water onto the city. The ensuing paralysis of its critical infrastructure brought hunger, death, desperation, and lawlessness. Catastrophes of this magnitude are so rare that many people regard their probability as essentially zero. But as the New Orleans disaster reveals, our civilization relies on the interacting operation of several large-scale, complex infrastructure systems. When key elements of one system cease to function, disruptions can spread into the others. Through these linkages, events that appeared remote can become more likely.

We now know that Hurricane Katrina destroyed or impaired critical parts of the area's industrial infrastructure, especially its energy infrastructure. The Gulf Coast region contains sea ports, oil refineries, drilling rigs, and pipeline hubs that send petroleum products and natural gas to customers throughout the United States. Katrina's damage to the power grid, shipping facilities, and refineries has already sent energy prices spiraling upward. But surely that picture is incomplete. People whose business and responsibilities concern the nation's economic performance want to understand the implications of Katrina's destruction for the short, intermediate, and longer term.

In the short term, there is little doubt that the storm will harm the nation's economy through its effect on energy prices. Before Katrina hit, high energy prices already were thought to be taking a toll on consumer spending for other goods and services. But the truth is that it will take some weeks to assess the full extent of the damage to the energy infrastructure and months before it can all be repaired. Consider that the storm destroyed warehouses that contained essential supplies and that skilled labor will be scarce. Moving people and material through the area will be challenging.

Unpredictably, U.S. stock markets actually posted slight gains for the week of the storm. The fact that they did not sell off could be interpreted as a sign of confidence in the nation's ability to overcome the shock over the medium term. It might also signal a belief that interest rates could follow a lower track than had previously been priced into the market. Interest rates declined across the board last week, but the steepest declines occurred at the short end of the yield curve. In fact, last week, financial market participants sharply revised their opinion about the probability of future hikes in the federal funds rate. Before Katrina, traders were expecting, with near certainty, an increase of 25 basis points in the funds rate at the September 20 FOMC meeting; they considered the probability of another 25 basis point hike at the November 1 meeting to be roughly 80 percent. But by Thursday, September 1, prices on financial instruments implied a probability of only 50 percent that the funds rate would advance 25 basis points at each of those FOMC meetings.

Before the storm struck, most market analysts were expecting the pace of economic activity to remain in the range of 3 to 4 percent for the next year or so, despite higher energy prices. They saw high energy prices as the result of strong global demand for energy resources rather than disruptions of supplies. Now that the nation has sustained a supply shock, rising energy prices have a different connotation. If the energy infrastructure proves to be highly resilient, the effects on GDP should be moderate and largely transitory.

What is clear at this point is that not much is known about damage to the energy infrastructure and the other critical systems such as power, transportation, and communication that also must function in order to keep commerce and energy flowing in the Gulf region. As this information arrives, financial markets will assess and price it, as they always do. Although not always correct in the final analysis, financial markets are excellent aggregators of information. For the time being, it should be comforting that they do not signal dire economic prospects for the nation.