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Estimating the oil spill's impact in the Gulf

In this past week's [SouthPoint](#), the Atlanta Fed's regional economics blog, we discussed some of the economics behind the oil spill in the Gulf of Mexico. We were careful to note that determining the impact of the spill is impossible because there are simply too many variables at work: the amount of time before the leaks are capped, the direction of the wind, wave action, water currents, the amount of oil that reaches the coast, the effectiveness of dispersion efforts, the efficiency of clean-up efforts on shore, the amount of federal spending, etc. Measuring the cost of the spill is simply out of reach at the moment.

We can measure the number of jobs at risk, however. Across Florida, Louisiana, Alabama, Mississippi, and Texas—the states likely to be affected most directly—total employment in tourism-related industries and agriculture was about 2.6 million (in 2008), or about 14 percent of total employment in those states. However, if we narrow our scope to metropolitan statistical areas along the Gulf Coast of the most affected states, the numbers are much smaller—just under 132,500—with most being in the accommodation and food services industry.

	Number of Jobs			Total
	Forestry and Fishing	Arts, Entertainment, and Recreation	Accommodation and Food Services	
Mobile	1132	2,847	15,291	19,270
Fort Walton*	332	2,218	12,195	14,745
Panama City	483	2,020	10,978	13,481
Pensacola	720	3,857	16,546	21,123
Houma	2557	1,463	7,573	11,593
Lake Charles	582	2,237	10,535	13,354
Morgan City	333	563	1,749	2,645
New Iberia**	234	348	1,997	2,579
Abbeville	380	198	1,114	1,692
Biloxi-Gulfport ***	929	4,361	20,722	26,012
Pascagoula ***	1081	536	4,327	5,944
TOTAL	8,763	20,648	103,027	132,438

*2007

**2006, Forestry and Fishing = 2003

*** Farm Employment

Source: U.S. Bureau of Economic Analysis

[enlarge](#)

At the Atlanta Fed, like most Reserve Banks, we not only monitor statistical data, but we also seek out anecdotal information from business contacts within the Southeast. We are hearing mixed reports on hotel cancellations, which could have a significant impact on not only employment in the region but also sales tax revenue. While there has been a flood of inquiries, cancellations are not widespread to date. But some areas are seeing an inflow of clean-up workers into their hotels. Although rather insignificant at this point, it does lead to a larger measurement issue. That is, it's also impossible to measure the degree that clean-up and containment efforts will offset losses in other industries.

[Econbrowser](#) estimates the cost of the spill to British Petroleum (BP) by measuring the change in the company's stock price:

"Stock prices give us a yardstick for the markets perception of a company's long run profitability. When an event, such as this oil spill, impacts a company it will also impact its long run profitability. The divergence of the stock price from what we would have expected had the event never happened is a measure of the net present value of the cost incurred by the oil spill. Event study analysis gives us a framework to answer just this question."

While the approach to determining the cost of the spill to BP is much more straightforward than guessing wind and sea currents, it doesn't get to the more complicated endeavor of determining the cost to local communities. For that we will have to wait and see what happens next. Here are some useful links to help keep up with events:

The U.S. Department of the Interior's Minerals Management Service, along with other agencies, has created a Web page dedicated to the [Gulf of Mexico oil spill response](#) that features regular updates, maps, and fact sheets. You can also register to receive e-mail notification of updates.

[The National Oceanic and Atmospheric Administration](#) is providing coordinated scientific weather and biological response

services to federal, state, and local organizations.

A joint effort is under way from the [Ocean Circulation Group and the Optical Oceanography Laboratory](#) at the University of South Florida's College of Marine Science to track and predict the Deepwater Horizon oil spill in the Gulf of Mexico.

The [Wall Street Journal](#) is also providing regular updates and coverage.

Finally, the *Washington Post* published a [graphic](#) of the spill and the affected areas of economic activity along the Gulf Coast.

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