

## **Understanding the Impact of the Drilling Moratorium on the Gulf Coast Economy**

Testimony by  
Rebecca M. Blank  
Under Secretary for Economic Affairs  
U.S. Department of Commerce  
before the  
U.S. Senate Committee on Small Business and Entrepreneurship  
September 16, 2010

Madam Chairwoman, Ranking Member Snowe, and distinguished members of the Committee, thank you for inviting me here to discuss the Administration's report released today on the economic impact of the drilling moratorium on the Gulf Coast economy. I am the Under Secretary for Economic Affairs at the Department of Commerce where, among other duties, I oversee much of the economic analysis done within Commerce. I have been involved with many policy impact studies, in my own research, while serving as a member of President Clinton's Council of Economic Advisers in the late 1990s, and while serving as dean of the Gerald R. Ford School of Public Policy at the University of Michigan.

Madam Chairwoman, I request that this interagency report be included in the record in its entirety. Written in response to a request from Senator Landrieu, this report provides our best estimates of the economic impacts of the drilling moratorium on the Gulf Coast economy. I use the term "Gulf Coast" to refer to the five states most impacted by the moratorium: Alabama, Florida, Louisiana, Mississippi, and Texas.

On April 20, 2010, the Deepwater Horizon drilling rig exploded, resulting in 11 deaths, 17 injuries and one of the worst environmental disasters in U.S. history. On May 28, the Secretary of the Interior imposed a deepwater drilling moratorium. This moratorium was challenged in

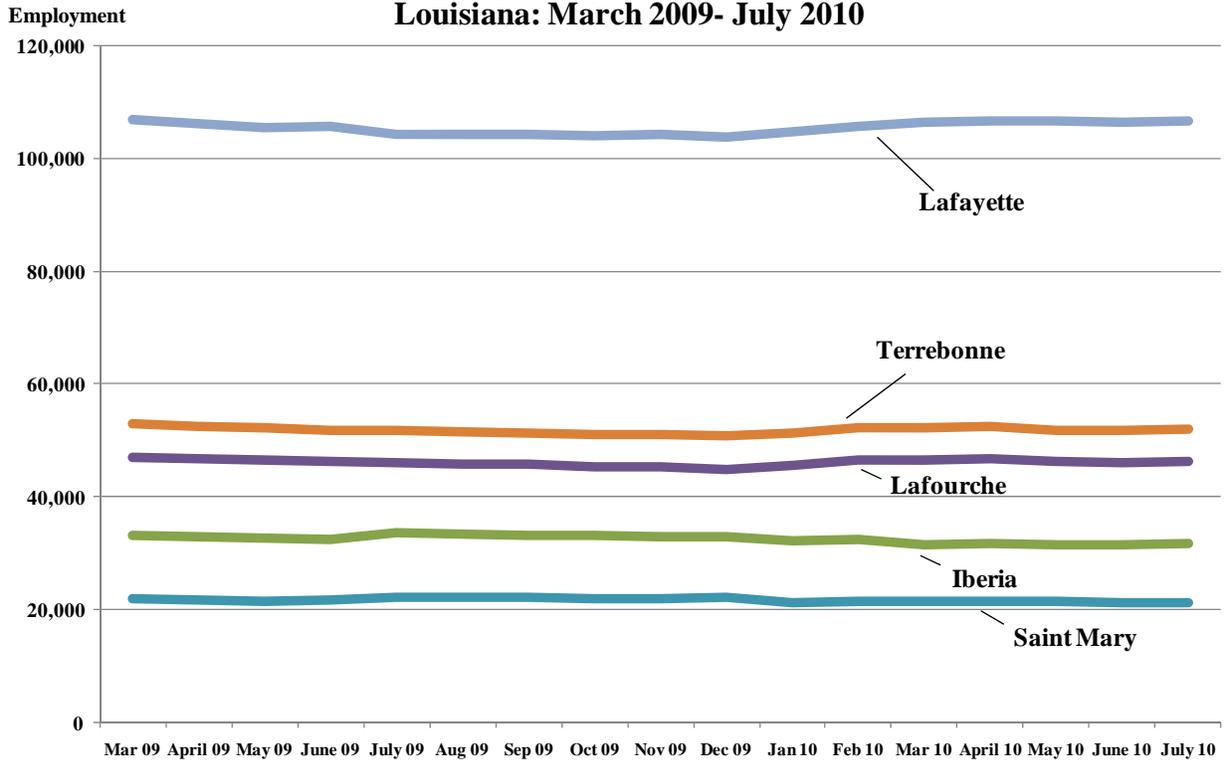
court and preliminarily enjoined. To address the continuing risk posed by certain drilling operations and after examining the options available for managing the Outer Continental Shelf (“OCS”) in a safe and environmentally sound manner, the Secretary issued a new suspension decision on July 12, 2010. This moratorium is in effect until November 30, 2010. The moratorium was imposed at a time when there was limited understanding of the cause of the BP Deepwater Horizon explosion. It has provided time to ensure the adequacy of the oil and gas industry’s safety practices and the adequacy of spill response capabilities should any future spills occur. Ensuring the long-term safety of the drilling industry in the Gulf is important to its economic viability as well as to the Gulf Coast environment.

Recent changes in the labor market in those Gulf Coast areas that rely heavily on deepwater drilling can provide an initial sense of the possible impact of the moratorium. We looked at changes in employment, unemployment and unemployment insurance (UI) claims in five Louisiana parishes that are reported to be heavily dependent on the deepwater drilling industry: Lafourche, Lafayette, St. Mary, Terrebonne, and Iberia.

Figure 1 shows employment in these five parishes since March 2009. Employment is at about the same level in July of this year (the last month for which we have data) as in March 2009.

Table 1 shows employment and unemployment data. Employment in these five parishes actually increased from April to July by 0.7%, similar to the change in the Nation and the State of Louisiana. We also look at UI claims in our report and find that they have been trending downward in absolute numbers and as a share of all state claims.

**Figure 1. Employment for Five Oil Industry Intensive Parishes in Louisiana: March 2009- July 2010**



Note: These are the five parishes in southern Louisiana where the oil drilling industry's presence is substantial.  
 Source: U.S. Department of Labor

**Table 1: Employment Changes from April 2010 to July 2010 for Five Oil Industry Intensive Parishes in Louisiana**

	<i>(Not Seasonally Adjusted)</i>				---Unemployment Rate---		
	-----Employment Level (in thousands)-----				April	July	Change
	April	July	Change	%Change	April	July	Change
<b>U.S. total</b>	139,302	140,134	832	0.6%	9.5	9.7	0.2
<b>Louisiana</b>	1,958.6	1,971.9	13.3	0.7%	6.2	7.6	1.4
<b>Total for 5 parishes</b>	259.5	261.2	1.7	0.7%	5.2	6.1	0.9
<b>Iberia</b>	31.4	31.9	0.5	1.6%	6.8	7.7	0.9
<b>Lafayette</b>	107.2	108.1	0.9	0.8%	4.7	5.7	1
<b>Lafourche</b>	46.8	47	0.2	0.3%	4.4	5	0.6
<b>Saint Mary</b>	21.4	21.5	0.1	0.5%	8	9.3	1.3
<b>Terrebonne</b>	52.6	52.8	0.2	0.4%	4.8	5.3	0.5

Source: Author's calculations using data from the Bureau of Labor Statistics, Current Population Survey (U.S. total) and Local Area Unemployment Statistics program (statewide and parish).

These data do not indicate that there have been no employment impacts associated with the drilling moratorium, but they do suggest that any losses have not been large to date, since significant losses would have shown up in the employment, unemployment and UI claim activity data.

Our analysis of the economic impact of this moratorium is based on data from a variety of publicly available industry and government sources. Our staff also spoke at length with a number of companies that work in the Gulf, including drilling contractors, operators, and well service firms. Our conversations were conditioned on a promise of confidentiality to help ensure candid responses to our questions. Taken together, the firms we spoke with had direct knowledge of over 50 percent of the deepwater rigs in the Gulf of Mexico at the time the first moratorium began.

To estimate the potential effects of the moratorium, it is important to understand the parameters of the Gulf's deepwater drilling industry prior to April 2010. There are basically three kinds of deepwater drilling rigs (semi-submersible drilling rigs, drillships, and platform rigs.) The number of rig workers and the costs of operation vary across these. Like many earlier studies, we estimate deepwater rig worker employment in the Gulf prior to the Deepwater Horizon explosion at about 9,700 workers. A total of about \$800 million per month was spent on operating these deepwater rigs.

Earlier studies assumed that many of these rigs would leave the Gulf Coast as a result of the moratorium and that virtually all of these 9,700 workers would become unemployed. This did

not happen. Of the 46 rigs located in the Gulf of Mexico in April 2010, 41 of them are still there as of September 13.

Furthermore, even for the rigs that are idle, drilling contractors and rig operators have, to date, held onto most of their employees. A primary reason to retain these employees is that they are highly skilled and it would be expensive to recruit and rehire them again in the near future. In addition, these highly skilled workers are able to conduct some backlogged rig maintenance and improvement. Some rig workers have been deployed to work outside the Gulf of Mexico. Based on our information, we estimate that fewer than 2,000 (about 20 percent) out of 9,700 rig workers have been laid off or have left the Gulf to work elsewhere. The top line in Table 2 shows these numbers.

**Table 2: Estimated Economic Effects of the Deepwater Drilling Moratorium on the Gulf Coast**

Rig Worker Employment	-2,000 (from base of 9,700)
Total Direct Spending Change*	-\$1.8 billion
Estimated Impact of the Spending Reduction on Total Employment in the Gulf Coast (including rig worker job loss)	-8,000 to -12,000 jobs
*Decline in rig spending on all activities, partially offset by replacement spending on wages.	

While deepwater rig worker employment has not fallen substantially, rig spending has declined because rigs are no longer conducting drilling operations. In particular, spending on drilling supplies, materials and services has fallen. As noted, a few rigs have left the Gulf and we assume their spending goes to zero in the Gulf Coast economy. For those rigs that remain in the

Gulf but are no longer working, we assume that rig leasing costs continue to be paid (about 50% of total costs) plus a small amount for supplies and materials for the rig workers remaining on the rigs, but any remaining spending has dropped to zero. Some of this reduced spending is offset by other sources of spending. For instance, unemployed rig workers are eligible to receive up to \$30,000 in wage replacement through the BP Rig Worker Assistance Fund.

Based on these assumptions, we estimate that over the six months of the deepwater moratorium, net spending will be reduced by about \$1.8 billion. The middle line of Table 2 shows this number.

This direct reduction in spending reduces employment in the industries that supply the Gulf Coast drilling industry and then in all other industries affected by declines in consumer and business spending. To measure this effect, we apply a “multiplier” that translates the direct reduction in spending into the full effect of reduced spending in the drilling industry on employment throughout the Gulf Coast.

To give an example of the nature of this analysis: If demand for drill pipe falls as a result of the moratorium, demand for services of supply vessels would also fall, which would in turn reduce the demand for diesel fuel and dock workers. If pipe is trucked to Port Fourchon, then demand for trucking services would also be affected. This reduced demand for pipe has resulted in fewer hours worked or lowered employment, which reduces earnings among the workers who are involved, from the production of the pipe to its delivery at the final destination. Fewer hours worked means reduced take home pay and lower consumer spending, which yields another

cascade of effects through the production and distribution chain for consumer goods. This one example demonstrates that many industries and parts of the country can be impacted by a single change in the drilling industry.

The standard multiplier that translates a direct reduction in spending into a total employment effect is designed to measure the impact of a long-term and permanent policy change. The drilling moratorium is neither. The use of a full multiplier would result in an estimated impact that is biased upward. The primary reasons include the following:

- The temporary nature of the moratorium will lead to a smaller effect than a permanent policy change would produce. Larger firms may be particularly able to switch workers into temporary work of another sort while waiting for drilling operations to start again. Of course, this means that small firms with less financial capital are likely to experience relatively larger employment losses. In a similar way, families that face reduced income may maintain consumption temporarily by using savings or increased debt to cover lost income.
- The full multiplier assumes that the spending losses are permanent, with no offset from increased spending on other activities. BP has publicly stated that it spent over \$8 billion during the first three months of the moratorium on spill response and cleanup activities. This new spending is likely to offset at least some of the spending reductions due to the moratorium.

It is impossible to say exactly what multiplier should be applied to direct spending reductions by the drilling operations in order to estimate the full employment effects of this reduced spending

on the Gulf region, although we know that using the full multiplier is too large. Because of this uncertainty, we estimate a range of employment effects, based on a range of reduced multipliers that we think are likely to capture the possible impact of the temporary moratorium.

From our analysis, we estimate that the six-month moratorium may temporarily result in up to 8,000 to 12,000 fewer jobs in the Gulf Coast. These jobs would not be permanently lost as a result of the moratorium; most would return following the resumption of deepwater drilling in the Gulf of Mexico. The bottom line of Table 2 shows these estimates.

This analysis assumes that drilling operations during the course of the moratorium would have continued at the pace witnessed immediately before the BP Deepwater Horizon event. However, in the aftermath of this event, deepwater drilling activities likely would have been curtailed even without a moratorium, as rig operators and contractors reviewed their safety procedures and as regulators examined the effectiveness of existing safety regulations. For this reason, our estimate is likely to overstate the true economic impact of the moratorium. Even in the absence of a moratorium, some of this spending would have been temporarily lost in the wake of such a serious disaster.

Our estimate differs from estimates in earlier studies and from the Department of Interior estimate made before the moratorium primarily because we have information at this point in time that was not available earlier. Specifically, we have learned that many deepwater drilling operators have kept many of their employees, whereas almost all of the earlier studies assumed that virtually all employees on these rigs would have been let go. These earlier studies largely

estimated a spending reduction based on what we now consider an overly large estimate of lost wages from rig workers. In contrast, our study emphasizes the reductions in spending on drilling supplies and services on the offshore rigs. We also take into account the fact that the multiplier for a temporary policy should be smaller than for a permanent policy. In short, our estimates are different, but we also believe that they are better, based on the real information that is currently available.

In addition to the employment effects, there is one other important potential impact of the moratorium, namely, the effect of the moratorium on oil production. With the help of the Energy Information Administration (EIA) within the Department of Energy, we have estimated the amount of reduced future oil production in the Gulf of Mexico due to delayed exploration and production activities during the moratorium. Note that the moratorium does not change the size of the estimated oil resources in the Gulf or the anticipated cost of exploiting those resources; rather, it delays production. In fact, depending on the discount rate applied, the present value of cumulative Gulf of Mexico deepwater production could actually increase relative to its baseline level if oil prices rise over time and future production is sold at a higher price.

EIA estimates that reductions in crude oil production resulting from the moratorium will increase from a monthly average of about 10,000 barrels per day in September 2010 to nearly 100,000 barrels per day by December 2011. The total cumulative reduction in crude oil output will be about 3.1 million barrels in 2010 and 30 million barrels in 2011. This represents about 0.2% and 1.5% of total U.S. crude oil production in each of these years. Two other organizations have made quite similar estimates. Furthermore, we estimate that there is likely to be no price effect

due to the moratorium. Oil is a highly fungible commodity traded on a world market and the estimated average impact of the moratorium on oil production in the Gulf next year represents less than one tenth of one percent of forecast world oil use.

In conclusion, the current evidence suggests that job impacts among workers in larger companies, particularly the companies involved with operating the drilling rigs in the Gulf of Mexico, may be relatively limited because these companies have chosen to retain their skilled labor. Most of the businesses impacted provide supplies and support to the drilling industry in the Gulf Coast. The magnitude of the spill response and cleanup spending in the Gulf Coast is large enough, however, that some of these businesses may have been able to replace some of their lost earnings by serving other customers.

The Administration has worked to mitigate any adverse impacts of the moratorium on workers. In May, the Administration proposed legislation calling for a new program of unemployment assistance, modeled after the Disaster Unemployment Assistance Program, to provide benefits to workers who lose their jobs as a result of a Spill of National Significance. In addition, as a part of the negotiations that resulted in the creation of the independent claims facility and the \$20 billion trust fund, the Administration also negotiated with BP to establish the Rig Worker Assistance Fund to which BP donated \$100 million.

While any job loss due to the moratorium, even temporary, is deeply regrettable, it is important to place these effects in the context of the economic, environmental and safety threat – including the potential loss of life – that the BP Deepwater Horizon explosion created. Given uncertainty

about the adequacy of existing safety regulations, the moratorium was designed to provide greater certainty that deepwater drilling in the Gulf Coast is being conducted in a safe manner, with effective safeguards and responses in place should problems arise. These safeguards are highly important given the expectation that Gulf Coast oil and gas will continue to provide a significant share of domestic energy production.

Thank you, Madam Chairwoman. I am happy to take your questions.