

Special Report

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August 20, 2010

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WHAT OIL SPILL?

The estimated 4.9 million barrels of crude that flowed into the Gulf of Mexico from the Macondo well was the largest oil spill in U.S. history. Not surprisingly, the resulting damage to the livelihoods of fishermen and other Gulf Coast businesses, and the environmental threat to delicate natural habitats, created a media and political furor. In the process, more than \$100 billion was wiped from the market value of BP shares at one point, with a further \$35 billion coming off Transocean and Anadarko – two other oil companies involved with the ill-fated Deepwater Horizon drilling rig. While the share prices of these companies have recovered from the lows, their combined market value is still \$90 billion below their pre-explosion level. And the suspension of BP's dividend deprives investors of \$2.6 billion a quarter.

There is never a good time to suffer a disaster of this type. However, it was all the more painful by occurring when confidence in the economy and financial markets was already very fragile. The Global Interdependence Center (GIC), in conjunction with Louisiana State University, recently held a meeting to assess the economic, environmental and political impact of the oil spill.

We were rather surprised to learn from the meeting's discussions that the spill's effects seem to have been significantly less damaging than might reasonably have been expected.

Economic Impact

The states directly affected by the oil spill are Louisiana, Mississippi, Alabama, Texas and Florida. Together, these account for around 16% of U.S. GDP.

But, the impact was largely confined to specific industries in the coastal regions of these states. As shown in **Table 1**, the Fishery and Tourism industries do not account for a very large share of output in the Gulf states. There also are multiplier effects on other industries, but the essential point is that the direct economic impact on the overall state economies has been relatively small. There had been fears that the spill might severely disrupt maritime transport in and out of Gulf ports, but this did not occur.

Of course, aggregate numbers understate the impact on local communities. For example, in small towns where fishing comprises an important share of employment, the ban on fishing has been a major event. In Louisiana, the shrimp catch in May was down 75% from year-ago levels. However, BP is paying out claims to many of the affected people, and these amounts plus spending to date by workers involved in the cleanup operation likely far exceed lost incomes in the fishing and tourism industries.

As of August 11, BP had paid out \$340 million in claims to affected residents and businesses. But, more importantly, the company had also spent around \$6 billion in cleanup efforts in the first three months of the disaster. At the peak, 46,000 people were employed in these operations, with 7,040 vessels and 121 aircraft. This provided a huge boost to local economies, with hotels, restaurants and other services all feeling the benefits.

If we take Louisiana as an example, the annual value of the dockside fish catch from coastal waters equals \$275 million, with coastal area tourism adding a further \$408 million. Thus, the direct negative effects

TABLE 1 The Size Of Impacted Sectors

Gross State Product (\$ Billion, 2007)				
	Total Private	Fisheries	Tourism	Oil & Gas
Alabama	138.40	0.06	2.90	1.40
Florida	655.50	0.20	40.80	0.10
Louisiana	184.80	0.33	5.60	31.50
Mississippi	72.50	0.04	3.30	2.50
Texas	1026.90	0.20	22.80	112.70

of the spill represent the percentage reduction from those figures. On the other side of the equation, Louisiana has received \$143 million in claims thus far, plus a fairly large share of the \$6 billion cleanup operation. Assuming a conservative 20% share, this gives a direct cash injection of \$1.3 billion, far exceeding the annual value of fishing and coastal tourism. Moreover, under the Oil Pollution Act, compensation will be paid for any loss of wildlife, and a healthy portion of the \$20 billion BP relief fund will go to the state for coastal restoration etc.

From a national point of view, many of those people who decided not to visit beaches in the Florida Panhandle, or were unable to engage in recreational fishing in the Gulf, probably pursued those activities in other parts of the U.S. Thus, the Florida east coast may have been a beneficiary. In other words, the national losses to fishing and tourism likely were much less than the local losses.

The regional authorities appear more concerned about the economic impact of the Administration's moratorium on deepwater drilling than about the direct impact of the spill. The concern is that the moratorium, plus the prospect of tighter regulations on future drilling, will drive oil companies away from the Gulf. Table 1 shows that the region's oil & gas industry swamps those of fishing and tourism in terms of output value.

Some tightening in drilling and production regulations is inevitable, especially as there seems to have

CHART 1 Gulf Of Mexico* Oil Production Mn Mn Bbl Bbl **TOTAL DEEPWATER**** 500 500 400 400 300 300 200 200 100 100 % **DEEPWATER**** 70 70 (AS A PERCENTAGE OF TOTAL) 60 60 50 50 40 40 30 30 20 20 10 10

OUTER CONTINENTAL SHELF. WATER DEPTH GREATER THAN 1000 FEET. SOURCE: BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT.

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been a lack of oversight with regard to the Macondo well permit. Nevertheless, the growing importance of deepwater wells to Gulf oil output (Chart 1) suggests that the government likely will back away from overly restrictive measures. The need to be more sensitive to environmental threats has to be balanced against the desire to reduce U.S. dependence on imported oil. Discouraging Gulf of Mexico production will merely force the U.S. to import more crude from overseas.

Environmental Impact

It is impossible to have such a large oil spill without nasty environmental effects. There has been the inevitable loss of wildlife, and potential irreparable damage to the region's delicate marshy coastal areas. Unfortunately, the full environmental impact may not be known for years.

The Administration has claimed that around 75% of the spilled oil has been removed or naturally dispersed. Some experts have disputed this claim, arguing that almost 80% of the oil remains in the Gulf and has merely sunk to the bottom, where it remains a serious environmental threat. The bottom line is that nobody really knows for sure where the oil has gone.

At the GIC meeting, Professor Ed Overton, Professor Emeritus at the School of the Coast and Environment at Louisiana State University argued that much of the oil has been degraded rapidly by bacteria. There are lots of natural crude oil seepages in the Gulf, amounting to two Valdez oil spills a year (i.e. about 500,000 barrels a year). Thus, the area has developed an ecosystem that copes with crude - essentially via absorption by bacteria. These bacteria break down the oil naturally without any serious implications for the environment. Indeed, plankton will feed on the newly fattened bacteria, providing more food for fish. One could even make the case that these effects, coupled with the recent fishing ban, could lead to a surprising expansion of fish stocks over the next couple of years. Professor Overton also claimed that aggressive skimming of surface oil prevented any lasting damage to the root structure of the sensitive marsh areas.

This is one of these frustrating situations where experts disagree and it is hard to know where the truth lies. Even experts can have agendas and those based in the region may be inclined to downplay the spill's impact given the importance of the oil industry to the local economy. Nonetheless, it does appear that most beach areas around the Gulf are largely clear of oil, and some areas have been reopened to fishing. Tests on recently-caught fish do not point to any contamination.

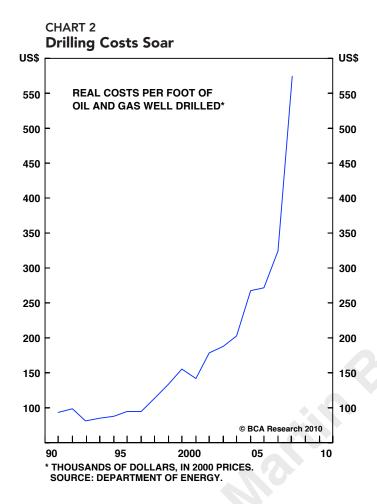
Politics Of The Oil Spill

At its peak, the oil spill dominated media coverage and that meant it also had a big impact on Washington politics. President Obama's initial response to the event received much criticism, with parallels being made to the Bush Administration's bungled handling of the Katrina hurricane relief efforts. It was argued that the government was too quick to let BP take control of the cleanup effort and this slowed the speed and scale of the response. And the oil industry and Gulf politicians argue that the Administration's moratorium on deepwater drilling was a panic move that threatens to cause more economic damage than the spill itself.

It has still to be decided whether the rig explosion was caused by BP's negligence. If that is the decision, then the company will face severe penalties. Under the Clean Water Act, BP faces a fine of \$1,100 per barrel spilled, even if it is deemed that the company was not at fault. With a charge of negligence, the penalty rises to \$4,300 a barrel. How the Administration handles this issue will be closely watched as President Obama will not want to be seen as being soft on BP.

The Republicans are using the oil spill as another way to attack the Obama Administration, and in normal circumstances, this could flare up as an issue in the forthcoming Congressional elections. But, times are far from normal. The economy and fiscal matters (e.g. whether to extend the Bush tax cuts) are the more dominant topics. There are many more important things than energy on the policy agenda.

The Gulf of Mexico accounts for around 19% of proven U.S. crude reserves and more than 23% of domestic oil production. Thus, any regulations that



discourage exploration and development could have a meaningful impact on future domestic oil supplies. The U.S. Administration must be seen to be doing something to limit the chances of future offshore oil spills, but sustaining economic growth and keeping oil as affordable as possible will prove to be greater priorities.

Oil Price Implications

An oil-hungry world is being forced to search in ever-more challenging places to replace declining production from maturing fields. That means drilling in deepwater areas and other difficult environments. In turn, that means increased exploration and development costs, and greater problems when accidents occur, such as with Deepwater Horizon.

Even if one does not accept the peak oil premise that global oil production may soon be in structural decline, it is clear that oil is becoming increasingly expensive to find and produce. In the U.S., the real cost of drilling oil and gas wells increased by almost 3.5 times between 2002 and 2007. The real cost per foot drilled rose threefold (Chart 2). The bottom line is that rising energy demand in the emerging world, coupled with growing supply challenges in many mature producing areas, has created a positive structural backdrop to oil prices.

Conclusion

The oil spill has clearly caused environmental damage and some local economic hardship. However, the massive scale of the cleanup operations plus BP's settlements of claims have been powerful economic offsets. Disasters often have the perverse effect of boosting economic activity.

One has to keep an open mind about the environmental harm as this may take a considerable time to become fully apparent. Nonetheless, the initial signs are encouraging, especially relative to the scare stories and fears that were prevalent just a couple of months ago.

Perhaps the most lasting impact of the oil spill will be on the financial fortunes of BP. Prior to the accident, BP was the largest company on the London Stock Exchange by market capitalization, slightly ahead of Royal Dutch Shell. By end-July, BP had fallen to 10th place, with a market value 30% below that of Shell. The full cost of the spill to BP has yet to be determined. There will be a deluge of lawsuits, but the judgment about negligence will be the most critical issue. It is not in the interests of the U.S. to drive BP into bankruptcy, and the company has a massive portfolio of assets. Nonetheless, from a financial perspective, it will remain a pale shadow of its former self for a long time to come.

The financial devastation that resulted from the burst U.S. housing bubble highlighted the need for more effective regulation and oversight of the financial services industry. In a similar vein, the Deepwater Horizon rig explosion pinpointed the need to ensure that offshore drilling meets required safety standards. In both cases, the challenge is to make sure that new tighter regulations do not cause more damage than the problems they are intended to solve.

Finally, the fact that oil prices have held in the \$70 to \$80 region, despite a lackluster global economic recovery, highlights the delicate balance between supply and demand. In the absence of a major breakthrough in alternative energy technologies, oil prices seem destined to move higher in the years ahead as supplies of cheap-to-produce oil dwindle.

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August 20, 2010



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