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Observation

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DEEPWATER HORIZON OIL SPILL TO HAVE LONG-LASTING IMPACTS

HIGHLIGHTS

- **The Deepwater Horizon oil spill has had little impact on the oil market thus far, but it is likely to have a significant influence on the offshore industry in the longer run.**
- **Moratorium in the U.S. to reduce output over the next 5 years, making the quest for energy self-sufficiency more challenging.**
- **In Canada, existing offshore drilling projects have continued; however, the current disaster may make it difficult for potential projects in the Arctic to obtain approval.**
- **Tighter regulations will undoubtedly lead to higher production costs, which could drive oil prices higher in the medium-to-longer run. But demand will also be a key factor influencing future oil prices.**
- **While tighter regulations in the offshore industry are a safe bet, the impact on the total global supply outlook will likely be minimal.**

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As oil continues to gush into the Gulf of Mexico nearly two months after the initial blowout, the Deepwater Horizon oil spill has become the worst offshore spill in U.S. history. Multiple attempts to contain the leak since the blowout on April 20th have failed, resulting in an estimated 60,000 barrels per day of oil contaminating the water, marine and wildlife. The latest attempt by BP to control the spill has had partial success, but it will still be some time before the leak is completely sealed. The severe environmental consequences have raised awareness of the risks associated with deepwater drilling and highlight the importance of implementing extensive safety measures.

Despite the massive oil slick, the catastrophe has had little direct impact on the oil market. The well that the Deepwater Horizon rig was drilling was an exploratory well rather than a producing well, so the incident did not have a significant impact on U.S. oil output nor oil prices. The bigger worry in the market, however, is how such a serious and long-lasting incident will impact the offshore industry and supply outlook in the longer run.

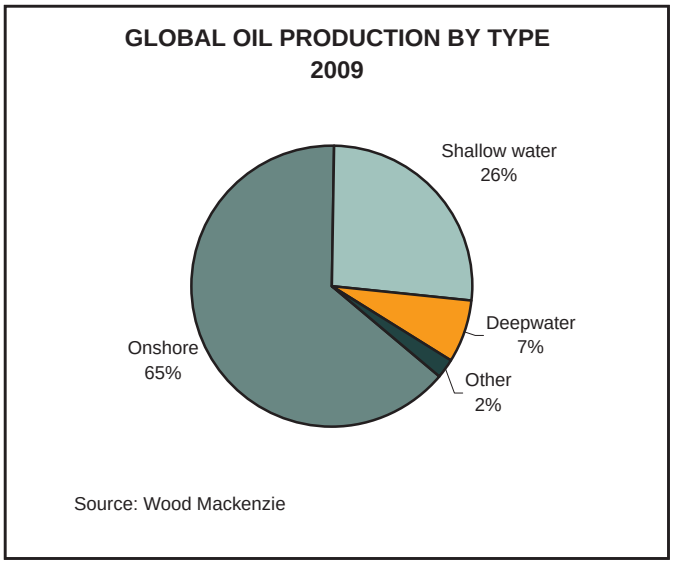
Moratorium in U.S. to reduce future output

While the exact cause of the blowout has not yet been determined, regulations regarding deepwater drilling are being scrutinized and will surely be tightened going forward. There has already been some response from governments around the world, particularly in the United States. The Obama administration has halted all offshore drilling in depths of 500 feet or more in U.S. waters for six months, cancelled exploration lease sales, and is not issuing any new drilling permits. This will likely have no meaningful impact on 2010 oil output in the country. However by 2015, the International Energy Agency (IEA) estimates that a one or two year delay in new deepwater offshore drilling could reduce potential new output by as much as 300,000 barrels per day (about 5% of projected U.S. output).

Given that offshore exploration plans in the U.S. have been stopped in their tracks, this could be a major setback for the country's goal of becoming less dependent on foreign oil. Indeed, offshore drilling in the Gulf of Mexico accounts for roughly 30% of total oil production in the country, and about a third of that is from ultra-deepwater drilling. Moreover, the Gulf of Mexico is a key area where the U.S. can increase its output, as 15% of total proven reserves are there. Prior to the recent oil spill, the Energy Information Administration (EIA) projected the share of total output from offshore oil to reach 35% by 2025. Hence, any ban on future offshore drilling, or tighter regulations limiting production, would dampen the long run oil supply outlook in the country.

But looking at the big picture, U.S. offshore production is less than 2% of global output (and deepsea drilling much less) – hardly enough to move markets. And, lower U.S. production would just translate into increased dependence on foreign oil. With OPEC sitting on over 5 million barrels per day of spare capacity, the impact on the global market, and thus prices, will be limited in the near

term. While offshore drilling in other regions has carried on – although some countries are not allowing any new drilling until the investigation into the Deepwater blowout is complete – major deepsea regions around the world, such as Brazil, Angola, and Nigeria, have shown no indication of tightening regulatory requirements for offshore drilling. Still, stricter standards in these regions once the cause of the current disaster is known remains a possibility (even if the impact outside the U.S. is smaller), and the IEA estimates a further 550,000 barrels per day of potential new output could be lost by 2015. However, while deepwater drilling currently accounts for roughly 7% of world production, the estimated output at risk would be less than 1% of projected global output.



Impact on Canada to be much smaller

In Canada, the recent oil spill has also triggered some concern regarding domestic offshore projects. The National Energy Board (NEB) is conducting a full review of drilling and safety requirements and is not issuing any new permits. Furthermore, the NEB is holding off on any decision to relax regulations regarding same season relief wells for large energy projects (as requested by major producers due to the short summer season in the Arctic) until after more is known about the cause of the Deepwater Horizon spill – which is likely months away – and safety regimes have been reviewed. But the offshore drilling industry in Canada is much smaller than that in the U.S., accounting for only 12% of total oil output in the country. There are currently only three active producing offshore oil wells in Canada, located off the coast of Newfoundland (none of which have been affected). A fourth project – the deepest in Canadian history and deeper than the one currently spewing oil into the Gulf of Mexico – has just begun in the area, although it is in the exploratory stages. While officials have allowed the project to go ahead as planned, stating that the regulations in place in Canada are strict enough, additional measures, such as increased monitoring and reporting, have been put in place for the project in light of the Gulf of Mexico disaster.

While Canada is less reliant on offshore drilling than the U.S., there is potential for additional projects off the west coast and in the Arctic. A moratorium on offshore drilling off B.C.'s coast has been in place since 1972, and is unlikely to be lifted anytime soon given the Deepwater Horizon blowout. But nearly $2 billion dollars worth of exploration licenses have been granted for the Beaufort Sea region in the Arctic. Producers will be limited by the safe season relief well capability if the NEB does not relax the regulation, but safety has also been questioned given that, should a spill occur, it would be much harder to contain in Arctic waters due to the frigid temperatures, ice-clogged waters and lack of infrastructure in the area. After the Gulf of Mexico fiasco, it may be quite difficult to get approval for any projects in the region.

The recent concerns surrounding the dangers of deepsea drilling have led to some speculation that the oil sands could benefit from this unfortunate disaster. While the oil sands still contribute heavily to the carbon footprint and face their own significant environmental challenges, they may be viewed as a "safer" alternative to deepsea drilling. Hence, the oil sands could help to pick up the slack that delayed or cancelled offshore drilling might leave, becoming a more important piece of the world supply outlook. Regardless of any new regulations that may come into effect, the offshore industry was only projected to account for a small (3%) share of total output in Canada in 2025, while the oil sands are expected to account for over 80%. Still, the notion that oil sands are a safer method of oil production, plus the fact that production costs may become lower than offshore costs once new regulations kick in, could attract more investment into the industry, helping to boost the Canadian economy. Moreover, lower potential output in the U.S. eases the risk of a regulatory ban on oil from Canada's oil sands, and could lead to increased oil exports to the U.S.

Tighter regulations could lift oil prices later this decade

Tighter regulations for offshore drilling projects will inevitably come with added costs. But given the recent catastrophe – and the hefty costs associated with cleaning it up – these added costs may be well worth it if it leads to

a higher level of safety. Given that the increase in costs could be substantial depending on the regulations, the price of oil must be high enough to make the projects viable and not deter investment in the industry. Currently, an offshore deepwater drilling project in the Gulf of Mexico requires an oil price of about US$60 per barrel to break even. If that increases significantly, oil prices in the current US$65-80 per barrel range may not be high enough to keep investment flowing into these deepwater projects. Given current estimates for oil demand growth over the next decade or two, these offshore projects could be an important chunk of future supply. So without investment in the offshore industry, the market could see a supply squeeze down the road, leading to higher oil prices.

Still, it is important to note that the impact from tighter offshore regulations will not likely be felt until the mid-to-latter part of the decade, as short-term fundamentals in the oil market are still quite weak. This explains why crude oil prices have been trending down in the midst of the crisis. Global inventories remain well above historical averages and will be more than able to offset the decline in U.S. offshore production expected over the next year or two. Moreover, spare capacity in OPEC producing countries will also help to mitigate any losses, limiting any near and medium-term upward pressure on prices stemming from offshore-related issues.

Even with the potential drop in output, the impact on oil prices in the latter part of the decade and beyond is still uncertain, as supply is only one side of the equation. If demand doesn't return to pre-recession levels – due to slower economic activity, substitution, or improved efficiency – supply may remain plentiful without having to raise prices. Moreover, if prices do rise significantly, it will provide an added incentive to find an alternative for oil and could prompt consumers and businesses to conserve energy as they did when prices shot up to over US$140 per barrel in 2008. So the demand side of the equation will be an equally important driver of the oil market in the future.

Nonetheless, the recent disaster in the Gulf of Mexico will likely have a significant impact on the offshore industry. We don't foresee a complete ban on deepwater drilling in the U.S. given its goal of becoming self-sufficient with respect to oil. However, tighter regulations and increased safety measures are a safe bet. But this isn't necessarily a game changer for the oil industry. Of course higher production costs could drive investment flows out of the Gulf of Mexico and into other regions. But looking at past experiences, while major disasters in the oil sector have indeed led to stricter regulations, investment has still continued to flow into the industry. For example, the Piper Alpha tragedy in the North Sea in 1988 led to a reform in the U.K. regarding offshore drilling regulations. More than 100 new safety procedures were accepted by producers, and additional offshore projects have been developed since then. Similarly, the Exxon Valdez oil spill in Alaska in 1989 led to the 1990 Oil Pollution Act, which included the requirement of detailed response plans and extra safety guidelines for shipping. And oil continues to be shipped through U.S. waters. So while new regulations in the aftermath of the Deepwater Horizon may lead to higher production costs and perhaps higher oil prices in the medium-to-longer run, they will likely prove beneficial to the safety of workers, wildlife and the environment, with limited impact on the global oil supply outlook.