On the Potential Impacts of North Dakota Becoming Saudi Arabia

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In a recent *WSJ* weekend interview ("How North Dakota Became Saudi Arabia", October 1, 2011), Continental Resources founder and CEO Harold Hamm contends that OPEC's declining market power is giving a significant boost to oil exploration and drilling in the US if not also other resource-rich countries. Indeed, he contends that, alone, the new Bakken oil fields spanning the Montana-North Dakota border hold the potential for yielding 24 billion barrels -- double the present US proved reserves!

It is worth considering what impact a substantial expansion of US crude oil production would have on not just the US oil market but also the global petroleum market. This may be accomplished using a simple model of world oil markets for petroleum and refined oil products formulated by the Zurich-based Center for Energy Policy and Economy (www.cepe.ethz.ch), which is presently based on 2005 international energy statistics compiled by the US Energy Information Agency. To set the stage, in 2005 the US produced roughly 8.4 million barrels of crude oil per day -- a very large amount for a single country. However, this figure was nearly 13 million barrels per day short of the US demand for crude oil, the shortfall being made up for by imported oil from OPEC and

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other countries. At an average world price of $55 per barrel, the US import bill for crude petroleum in 2005 amounted to nearly $169 billion.

Suppose instead, however, US petroleum production were to increase in line with the new US reserves accounted for by the Bakken oil fields. This would mean a doubling of US production of crude oil to a level of about 16 million barrels per day. And, according to the CEPE model, it lead to a decline in US oil imports, to just less than 6 million barrels per day -- saving the US economy $91 billion in annual payments for oil imports (at $55 per barrel). In fact, the savings would be even greater according to the CEPE model, because the increase in o US output of crude oil would result in a reduction of the average world price for crude petroleum by about 15 percent, to just $47 per barrel. Moreover, this saving would be magnified for individual, intermediate and final consumers of oil refinery products, because prices of gasoline, distillates, and other major refined products would fall across the board by almost 10 percent.

These are truly substantial impacts that would work to the benefit of the US economy, individual US producers and consumers, and the world economy in general. They might prove even more substantial if the CEPE model of the world oil market were updated to a more recent baseline than 2005, considering that the 2011 average world price of crude petroleum is nearly $100 per barrel and the economic performance in the US and other advanced economies has been dismal since 2009. Unfortunately, however, the current US administration and its regulatory environment is strongly opposed to promoting greater domestic development of petroleum reserves, as lamented by Mr. Hamm in his WSJ interview, leaving the incentives for greater oil field exploration and development arising from the decline in OPEC market power to competitors abroad. To be sure, expansion of foreign oil production, for instance in Brazil, might yield similar benefits for the world economy as greater US production, but the benefits to the US economy would be more indirect and likely accompanied by continued if not greater geopolitical uncertainties and concerns for the stable supply of increased, not reduced, US imports of crude petroleum.