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PERSPECTIVE

Sustainability Blog from the Erb Institute

UNIVERSITY OF MICHIGAN

## The Simple Economics of Offshore Drilling

by Andrew J. Hoffman and Thomas P. Lyon



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There is much talk today about offshore oil drilling as a way to lower gas prices and reduce the strains on American consumers. But, much like the gasoline tax holiday proposed in the spring, the public debate is full of lots of political gimmickry and little sound economics. Let's consider the facts and be honest about the ultimate results of offshore drilling. It will not lower gasoline prices. It will transfer wealth from oil producers like Chavez, Putin and the Saudis to the oil companies that develop these offshore assets. This can have some benefits. It may help us reduce the flow of funds to terrorist organizations and it will certainly help investors in the oil companies that exploit our domestic oil resources. But American consumers will never see benefits at the pump.

Consider the simple economics of oil pricing. If Exxon-Mobil, Chevron, BP, Shell, Total or some other oil company is given the rights to drill oil off the coast of California or the Gulf of Mexico, does anyone really believe they will sell that oil at a discount to the American consumer? No, that oil will be sold at the prevailing price on global markets. Oil drilled in US waters is indistinguishable from Saudi or Russian oil of comparable quality. Oil prices are determined by global supply and demand, and there is a single market-clearing price for oil of a given quality. There simply is not enough domestic oil offshore to make a meaningful dent in oil prices. The U.S. Department of Energy issued a report on offshore drilling last year, which found that "access to the Pacific, Atlantic, and eastern Gulf regions would not have a significant impact on domestic crude oil and natural gas production or prices before 2030. Leasing would begin no sooner than 2012, and production would not be expected to start before 2017." It concluded, "Because oil prices are determined on the international market, however, any impact on average wellhead prices is expected to be insignificant."

Although offshore drilling won't bring down gas prices, it would at least allow us to divert some oil dollars away from OPEC and into the pockets of investors who own shares of western oil companies. (Since most American retirement portfolios include oil stocks, this benefit is widely shared.) In addition, to the extent that OPEC countries are financing the teaching of virulent anti-Western ideas, this could have a small positive effect in reducing the risk of terrorism and enhancing national security. Strangely, these benefits have been largely omitted from the political debate.

Whether these financial gains are worth the environmental (and aesthetic) costs of offshore drilling has also been largely omitted from the debate. Oil spills happen, and they cause real environmental and economic harm. Just last month, over 400,000 gallons of oil were spilled in the Mississippi river, forcing a closure of 100 miles of the river. Of course, much bigger spills have occurred in American waters. In 1969, the blowout of a Unocal rig off the coast of Santa Barbara spilled 3 million gallons, and in 1989 the Exxon Valdez spilled 11 million gallons off the coast of Alaska in 1989. We find it ironic that the environmental and aesthetic impacts can be ignored in the push to place oil rigs off our coasts while opposition to offshore wind mills occupying similar real estate remains strong. Windmills have no similar environmental impacts and the aesthetics are in the eye of the beholder. One reason for this opposition may be that wind has the annoying habit of showing up off the coast line of wealthier Americans in places like Nantucket Sound and the West Coast of Michigan.

Rational people can disagree about whether offshore drilling is a good idea, but let's get the debate focused on the true issues. At heart, this is an issue that pits environmental protection against financial gain. And it is a tired contest, one that has been paraded in front of the American people since the 1970 OPEC oil embargo in order to protect oil company interests. It will have at most a trivial impact on gasoline prices for the consumer.

In the end, oil prices will fall in one of two ways. The first is if supply increases in a significant way. The world consumed 43 billion barrels of crude oil in 2006, and the US Department of Energy estimates that increased offshore drilling in the US might increase total global supplies by 18 billion barrels of oil, spread out over a period of decades. Overall, it is just a drop in the bucket.

The second way that prices can drop is if demand decreases. That can happen as consumers adopt innovative energy-efficient technologies, such as hybrid cars. Demand can also decrease through good old-fashioned competition. This fact is understood by most Americans. When there are viable alternatives to oil, demand will drop and so will the margins that companies can charge for this singular resource. If we want to talk seriously about opening up the energy reserves of this country, we need to talk about diversification – another concept understood by most Americans

Only when this country gets serious about all forms of energy as ways to give consumers options at the pump and the electric meter can we hope to solve the energy problems we face. By unlocking American ingenuity in fields that directly compete with oil, we can and will find a way out of this predicament. The truth is that venture capital is pouring into alternative energy with the likes of T. Boone Pickens and others seeing the way out through innovation. According to New Energy Finance, annual combined revenue for solar photovoltaics, wind power, biofuels and fuel cells jumped nearly 39% from \$40 billion in 2005 to \$55 billion in 2006. Other

estimates put the number at a record \$70.9 billion. The global wind energy market alone grew by 32% in 2006. And with numbers like these, investment dollars are flowing. In 2006, the total U.S. venture capital investment devoted to clean energy companies reached \$2.4 billion, over 9% of all VC spending. Why can't our politicians share the same faith and hope in the American can-do spirit? We cannot solve this problem using the same thinking and the same technology that got us into the mess in the first place. We are poised for an energy renaissance in this country, if only our political leaders don't get in the way.

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