Exploration of Crude Oil Price effects on U.S. Oil and Gas Production

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This research explores how world oil prices affect oil and shale gas production in the United States. The assumption is that high crude oil prices benefit the oil and gas industry in the United States by allowing high cost projects, such as off-shore drilling and hydraulic fracturing, to become economically viable methods of production. Lower prices for crude oil, as we have seen in the past several months, make it harder for companies to turn a profit. For some companies, lower prices could halt production and/or lead to bankruptcy. It is assumed that lower crude oil prices will have a negative effect on oil producers in the United States. While that may be the case, a lower crude oil price may actually benefit the industry of hydraulic fracturing for natural gas, specifically in the Utica and Marcellus shale.

The majority of the information presented in this paper will come from secondary sources, such as news articles, credible databases, and published papers. The rest of the information gathered will be from interviews with professionals in the oil/gas industry, and researchers. To fully understand this topic, I start by exploring and analyzing factors that influence world oil prices, focusing on the constituents of global supply and demand, as well as the role of futures markets. Second, I explore how oil prices differentially affect U.S. oil and gas exploration and production. Finally, I use my results to show how global changes in crude oil prices are likely to affect various regions of the United States.

(Research-in-progress summary)