The U.S. Oil Supply Revolution and the Global Economy

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Abstract This paper investigates the global macroeconomic consequences of falling oil prices due to the oil revolution in the United States, using a Global VAR model estimated for 38 countries/regions over the period 1979Q2 to 2011Q2. Set-identification of the U.S. oil supply shock is achieved through imposing dynamic sign restrictions on the impulse responses of the model. The results show that there are considerable heterogeneities in the responses of different countries to a U.S. supply-driven oil price shock, with real GDP increasing in both advanced and emerging market oil-importing economies, output declining in commodity exporters, inflation falling in most countries, and equity prices rising worldwide. Overall, our results suggest that following the U.S. oil revolution, with oil prices falling by 51 percent in the first year, global growth increases by 0.16 to 0.37 percentage points. This is mainly due to an increase in spending by oil importing countries, which exceeds the decline in expenditure by oil exporters.

Keywords Tight oil, shale oil, fracking revolution, oil price decline, oil supply, global macroeconometric modeling, and international business cycle

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