The Impact of Oil Price Shocks on Economic Growth in Oil-Exporting Countries: Test for Asymmetry

Hossein Taslimi

Oil price shocks in 1970s and the following economic downturns over a decade triggered the discussion on the contribution of the oil price shocks to the recession in U.S. economy. Most of the studies on the macroeconomic effects, particularly asymmetric effects, of oil price shocks have focused on the oil-importing countries, but oil-exporting countries are also affected by oil price shocks. These countries rely heavily on oil export revenues to run their economic activities in different sectors. Therefore, any price changes could tremendously affect both economic structure and performance in those countries. This study aims to shed light on the question of asymmetric effects of oil price shocks on economic growth in oil-exporting countries. That is, adverse effects of lower oil prices are larger than the stimulating effects of higher oil prices in oil-exporting countries. The sample consists of both developed and developing countries which let us track different effects of oil price shocks on the economies with different levels of development. I employ a panel data methodology to control for country specific heterogeneities in the estimations.

The main findings imply that asymmetry is supported in the long-run for developing oil-exporting countries. However, there is not a significant statistical evidence to suggest asymmetry in developed oil-exporting economies. The above mentioned results hold for the range of robustness checks, including alternative measures of oil price shocks.

I also examine the effect of institution quality on how the oil-exporting economies respond to different oil price shocks. Institutional quality has been recently considered as one of the determinants of economic performance in growth models (Rodrik et al. 2004, Acemoglou et al. 2010). Since government plays a key role economic activities in most of the oil-exporting countries, institutional quality can be considered as an important transmission channel through which oil price shocks affect macroeconomic variables. The findings suggest that the higher institutional quality in developing oil-exporting countries would lead to less adverse effect of negative oil price shocks on economic growth.