ANALYSIS OF MACROECONOMIC EFFECTS OF OIL PRICE SHOCKS: THE CASE OF SOUTH AFRICA

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Abstract

This paper attempts to capture the role and effects of oil price shocks to an oil-importing economy, South Africa. An adapted version of the dynamic stochastic general equilibrium model (DSGE) of Blanchard and Gali (2008) is calibrated to the South African economy. The results confirm that oil price shocks have had a considerably lesser effect on the South African business cycle over the last four decades. Moreover, real wage rigidities, oil shares in consumption and production, credible monetary policy and a benign macroeconomic environment are all important explanations for dampened pass-through effects of oil prices. In addition, some counterintuitive results were observed for employment. Particularly, evidence suggests that employment is resilient amidst oil price shocks. The theoretical model, in tandem with other research findings, purports that larger than anticipated mark-ups (implying a lower elasticity of substitution between domestic goods) and high employment rigidities (implying lower than expected wage rigidities) are possible sources of the counterintuitive findings. In addition, the initial positive output responses can possibly be attributed to this finding, jointly with the value added effect elucidated from the DSGE model.