Monetary policy implications for an oil-exporting economy of lower long-run international oil prices

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AUTHOR OR EDITOR Franz Hamann Bejarano-Rojas, Jesús Antonio Diego Rodríguez AUTHORS AND/OR EDITORS Bejarano-Rojas, Jesús Antonio
The sudden collapse of oil prices poses a challenge to inflation targeting central banks in oil exporting economies. This paper illustrates that challenge and conducts a quantitative assessment of the impact of permanent changes in oil prices in a small and open economy, in which oil represents an important fraction of its exports. We calibrate and estimate a variety of real and monetary dynamic stochastic general equilibrium models using Colombian historical data. We find that, in these artificial economies the macroeconomic effects can be large but vary depending on the structure of the economy. The main channels through which the shock passes to the economy come from the increased country risk premium, the real exchange rate depreciation, the sectoral reallocation of resources from nontradables to tradables and the sluggish adjustment of prices. Contrary to the conventional findings in the literature of the financial accelerator mechanism for single-good closed economies, in multiple-goods small open economies the financial accelerator does not play a significant role in magnifying macroeconomic fluctuations. The sectoral reallocation from nontradable to tradables diminishes the financial amplification mechanism.

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