Dutch disease effect of oil price on agriculture sector: evidence from panel cointegration of oil exporting countries

ABSTRACT

This study aims to investigate the long-run relationship between oil price and value-added share of GDP of agriculture in 25 oil-exporting countries. We use the panel heterogeneous cointegration test and fully modified OLS (FMOLS), dynamic (OLS) and pooled mean group (PMG) methods to examine the long-run effect of real oil price and real exchange rate on agriculture. The result of the Pedroni cointegration exposes the long-run relationship between the variables under study. Panel cointegration estimators show the negative and significant effect of oil price and exchange rate on agriculture value added. These results indicate the existence of the Dutch disease and de-agriculturalization in oil-exporting economies. The present study contributes to existing literature that concentrates on the Dutch disease and diagriculturalization by analyzing the effect of real oil price and real exchange rate on the agricultural sector in the long- and short-run in developing oil-exporting countries.

Keyword: Oil price; Agriculture; Dutch disease; Panel cointegration