Factors influencing fertilizer demand in developing countries: evidence from Malawi

ABSTRACT

Purpose: The purpose of this paper is to examine some factors that influence the intensity of fertilizer use in Malawi. Design/methodology/approach: The study uses Engle-Granger, Engle-Yoo three steps and autoregressive distributed lags (ARDLs) approaches to examine the long-run and the short-run dynamics among the variables using annual data from 1961 to 2006. Findings: The econometric results indicate that all the variables exert significance influence on the quantity of fertilizer demanded excluding population growth, while the results of the short-run model indicate that the responsiveness of fertilizer demand to all the variables is significant. Research limitations/implications: Although, this study has provided some helpful results in understanding the major factors responsible for low fertilizer consumption in the study but some time series data on important factors are lacking. Originality/value: The work is different from already existing literature in Malawi. The authors included subsidy and real gross domestic product to account for the effect of macroeconomic shocks and policies, which has not been accounted for by other related empirical studies. Moreover, this study used ARDLs techniques that can overcome the problem of insufficiently long time series data which is a significant contribution to the existing literature.

Keyword: Cointegration; Fertilizer demand; Long-run relationship