

Maize Price Transmission in Southern Africa under Multiple Regimes and Thresholds

Abstract

Analyzing the extent and speed of price transmission between different locations can help policy makers understand how well their country's markets are connected to those in other regions, and how long local scarcities might be expected to persist. This research investigates maize price transmission from the Republic of South Africa (RSA) to Malawi and Zambia using a nonlinear modeling framework that allows for multiple thresholds and regime shifts in the price transmission process. Boundaries for different spatial price transmission regimes are estimated based on the size of trade flows from RSA to the country and its neighbors. The modeling framework is general enough to allow for both stationary and/or nonstationary prices, and applies the recently developed multiple threshold selection framework of Gonzalo and Pitarakis (*Journal of Econometrics*, 2002) to support threshold selection. Results indicate the extent and speed of spatial price transmission in the region are regime dependent, with prices generally being more connected when import quantities are relatively high. Furthermore, we find that the nature of the price transmission process from RSA to Malawi is quite different than from RSA to Zambia. Possible reasons for this difference will be discussed within the maize marketing policy environment of the two countries.