An Application of the Two-Regime Threshold Vector Error Correction Model to Analyze Asymmetric Price Transmission of Milk in Zanjan Province of Iran

Moharram Ainollahi ¹ and Mohammad Ghahremanzadeh ²

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Abstract

In this paper asymmetric price transmission mechanism and nonlinear adjustment between producer and retail prices of milk were examined in Zanjan Province of Iran. For this purpose, a Two-Regime Threshold Vector Error Correction Model (TVECM) and a Sup-LM Test developed by Hansen and Seo (2002) were employed for checking presence of a threshold effect. Application of unit root tests indicated that both wholesale and retail prices are I (1), and Johansen test verified cointegration of the series in the long-run. Results of the Sup-LM test confirmed threshold adjustment of product price towards the long-run equilibrium. Furthermore, results obtained from TVECM revealed that the coefficient of ECT is significant only in the first regime of retailing equation implying that retailers significantly respond to the decreasing deviations from the long-run equilibrium. While adjustment coefficient is not significant for wholesale equation in both regimes to imply that there is not significant inclination to react to deviations from the long-run equilibrium among the wholesalers despite the retailers.

Keywords:
Hansen and Seo Approach, Threshold Vector Error Correction Model, Asymmetric Price Transmission, Vertical Integration, Zanjan

¹ PhD Candidate of Agricultural Economics, University of Tabriz, Tabriz, Iran.
² Associate Professor of Agricultural Economics, University of Tabriz, Tabriz, Iran.
* Corresponding author’s email: mainollahi@yahoo.com