Asymmetric Effects of Exchange Rate Changes on Exports: A Sectoral Nonlinear Cointegration Analysis for Turkey

Cevat Bilgin[1]

Abstract

This paper examines the effects of the real exchange rate changes on the selected sectoral exports of Turkey's manufacturing industry in the context of nonlinear auto-regressive distributed lag model (NARDL). NARDL method includes short-run and long-run coefficient estimates and embraces the asymmetric effects. The previous studies generally used the linear models on the aggregated data and they offered ambiguous results. The latest studies have preferred to use the method of NARDL on the bilateral trade balance data. Instead of using bilateral data, this paper considers the data of sectoral exports, specifically the exports of the selected Turkey's manufacturing sectors. The estimated NARDL models supply the empirical information about the asymmetric effects of the real exchange rate on the sectoral exports. Results from the model for each sector provide the evidence indicating that the depreciation and appreciation of the domestic currency have asymmetric significant effects on the sectoral exports.

Keywords: Real exchange rate, Sectoral Export, Nonlinear Cointegration, Asymmetric Effects

---

[1] Department of International Trade and Logistics, Bursa Technical University, Bursa, 16330, Turkey. Cell Phone: 05335230423, e-mail: cevat.bilgin@btu.edu.tr