

Nonlinearity in ASEAN-5 export-led growth model: Empirical evidence from nonparametric approach

Abstract

The nonlinearity effect on the relationship between export and economic growth has been highly debated in recent research. In previous literature of export-led growth hypothesis, the possibility of nonlinearity in the relationship has been generally ignored. There were comprehensive studies based on linear model, but only a few isolated cases in developed countries focused on nonlinearity in testing this hypothesis. The key drawback of the linear model is the restricted classical assumptions in hypothesis testing. Moreover, the linear model may possibly overlook a significant nonlinear relationship. In this study, the potential nonlinear long-run and short-run relationships are respectively examined by nonparametric cointegration test and nonlinear causality test, in ASEAN-5 countries. The nonparametric cointegration results contribute to the literature by highlighting the nonlinear long-run relationship between exports and GDP per capita for Malaysia, Thailand, Indonesia and Singapore. The findings obtained from the nonlinear causality test also showed that the causal effect of export and GDP is in the nonlinear form, in the case of Thailand and the Philippines.