

Impact of Trade Deficit on the Current Account Deficit: Markov Regime Switching Approach / Ticaret Açığının Cari İşlemler Açığına Etkisi: Markov Rejim Değişimi Yaklaşımı

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ABSTRACT

In this study, it is aimed to determine the non-linear relationship between the current account deficit and the foreign trade deficit (also called twin deficit) in the period of 1998:01-2017:02 for Turkey and Markov Regime Switching(MRS) Model was used to find the answer to the question of whether the trade deficit has caused regime changes in the current account balance. Because of the inadequacy of linear models to represent asymmetric variables, RS models are presented which are useful for modeling the behavior of nonlinear time series in different conjunctures. The basic idea of the model is based on the identification of asymmetrical effects dominated by a time series in the form of a probabilistic structure. These models provide information about the fluctuation characteristics of the series according to different regime characteristics, giving information about turning points and the length of stay in the regimes. In addition, with the aid of transition matrices, after one period later while in tperiod, it is possible to obtain probabilities of the staying in the same regime or the probabilities of the transition to another regime. In the study, firstly, it was tested whether the series were stationary or not, then whether the stationary series were linear or not, for the series that are determined to be nonlinear, analyzes were performed using MRS models which are suitable for the purpose of working from nonlinear models. The finding of the study is that depending on trade deficit, the current account balance has three regimes: the crisis, the unsustainable regime and the sustainable regime. By evaluating the findings obtained here, various policy proposals are presented for policy makers in Turkey.

KEYWORDS Markov Regime Switching Model; MS-AR Model; Current Account Deficit

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