

Asymmetries in the Japan's revenue-expenditure nexus^{*1}

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Abstract

The paper investigates the revenue-expenditure nexus in the case of Japan by using four variables of revenues and three variables of expenditures. The technique to analyze the causal relationship depends on the properties of the series. This paper utilizes three kinds of approaches; a VAR model setting by adding the extra lags, which is provided by Toda and Yamamoto (1995), a differenced VAR modeling, where there is no cointegrating relationship between non-stationary series, and a threshold error correction specification, which is proposed by Enders and Siklos (2001).

It is found that when we focus on the total expenditures and revenues, there is no causal relationship between them and the institutional separation hypothesis is supported in Japan. However, replacing the total revenues with the revenues by bond issues, the causality runs from the total expenditures to the revenues, and this implies the spend-tax hypothesis is valid when we consider the revenues consist of issuing the bonds. Furthermore, when more controllable variables are set as expenditures, it is found that the MTAR setting is statistically chosen, asymmetries in the adjusting process of the deviation from the long-run equilibria is found, and in the case of worsening changes of budget deficits the adjustment process works well to avoid the deficit crisis.

JEL classification: C32, C54, H50, H60

Key Words: Revenues; expenditures; central government; asymmetries; Granger non-causality; error correction model; TAR/MTAR model; structural break

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