Revisiting the J-Curve for Japan

Masanori Ono (Fukushima University) and SaangJoon Baak (Waseda University)

Abstract

This paper investigates the J/S curve phenomenon in the Japanese trade data. In particular, the cross-correlations, impulse responses, and Granger-causalities between the net export and the terms of trade in Japan are examined to see whether the J/S curve is observed in the Japanese data from 1980Q1 to 2008Q3. Considering the drastic changes in the international trade environment surrounding Japan, the possibility of structural breaks in the J/S curve is examined by a VAR stability test. Based on the results of the VAR stability test, the data are split into three sub-period data sets (1980Q1-1986Q2, 1986Q3-2000Q2, and 2000Q3–2008Q3), and the necessary analyses are performed for each sub-period. In addition to the analyses of the aggregate data, the relationship between the bilateral trade balance and the bilateral real exchange rates between Japan and its three major trading partners are examined for each sub-period. The test results indicate that the J/S curve phenomenon is present in the aggregate Japanese data for the second and third sub-periods. In addition, the main contributors to the generation of the Japanese J/S curve are the United States in the second period and China in the third period.