

Oil Consumption and Macroeconomic Activity in Japan

中京大学 英 邦広

This paper investigates the important relationship among oil consumption, price of oil, and economic activity during the period from 1986 to 2008 in Japan. In the first step, we employ the residual-based test for cointegration with a structural change proposed by Gregory and Hansen (1996), and find the long-run relationship among oil consumption, price of oil, and economic activity and a break point among these variables. In the second step, we use the lag augmented-vector autoregression (LA-VAR) method developed by Toda and Yamamoto (1995). It is found that the oil consumption can play an informational role in predicting future economic growth after the burst of the economic bubble in the early 1990s. Therefore, these empirical results show that the change in economic situation affects the relation of oil consumption and its price and economic growth, and impacts causal linkage between these variables.

Keywords: Oil consumption; Structural change; Oil price elasticity; Income elasticity

JEL classification: C22; Q43