Abstract

This paper investigates whether fiscal sustainability holds in Japan, estimating a Markov-switching vector-auto-regressive (VAR) model. Three fiscal sustainability conditions are identified in one VAR model, which are the stance of government, Domar (1944) type GDP growth, and other business cycle factors. Main findings are summarized as follows. First, a regime switch has occurred in the early 1990s. In the first regime, it appears that the government adopts the Ricardian stance to the past debt levels, while such fiscal reactions are not observable in the second regime. Furthermore, only in the second regime, Domar (1944) type income growth significantly decreases the debt-GDP ratio. Second, however, the contributions of these two shocks are minor in explaining historical variances of the debt-GDP ratio in both regimes. Third, forecast simulations reveal that the debt-GDP ratio is not sustainable in the second regime. Fourth, counterfactual simulations, however, show that around two percent nominal growth or Ricardian fiscal stance can maintain the debt-GDP ratio to be sustainable.

Keywords: Debt-GDP ratio, Fiscal sustainability, Ricardian regime, Dynamic inefficiency, Markov-switching, VAR

JEL classification: C11; E62; H63; H68