

Optimal Fiscal Policy Rule for Achieving Fiscal Sustainability: *The Japanese Case*

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Abstract

Japan's debt-to-gross domestic product (GDP) ratio is the highest among Organisation for Economic Cooperation and Development (OECD) countries. This paper will first consider whether Japanese government debt is sustainable. Next, while the Domar condition and Bohn's condition are often used in the literature to check whether a government's debt situation is in a dangerous zone, this paper will show that the Domar condition is obtained only from the supply of government bonds. A simple comparison of the interest rate and the growth rate of an economy using the Domar condition is not adequate to check the stability of a government's budget deficit. The model determines both the interest rate and the growth rate of the economy endogenously. Third, this paper shows that Bohn's condition satisfies the stability of the government budget in the long run by imposing constraints on the primary balance. However, meeting Bohn's condition does not confer economic stability: Even if the condition is satisfied, the recovery of the economy may not be achieved. This paper proposes a new condition considering both the demand and supply of the bond market that satisfies both the stability of the government budget and the recovery of the economy. The paper sheds light on these issues both theoretically and empirically. The empirical findings show that to achieve fiscal sustainability based on the optimal fiscal policy rule provided in this paper, both sides of the Japanese government budget (expenditure and revenue) need to be adjusted simultaneously. Moreover, the results show that the decrease in government expenditure has to be more than the increase in tax revenue.

Keywords: Japanese Bond Market, Fiscal Sustainability, Fiscal Policy Rule, Government Debt Management

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