

# Fiscal Policy May Be Harmful When It Is Effective

Yasushi Iwamoto

University of Tokyo

## Abstract

This paper develops a framework of the welfare analysis of fiscal policy. Murphy (2009) presented a formula, where the necessity of fiscal stimulus can be judged by some deep parameters. This paper aims to advance his approach by deriving his formula from an umbrella model that is a reduced form model of some major macroeconomic models. The Real Business Cycle model with distortionary taxation is then considered to focus on the relationship between the multiplier and deep parameters of the structural model. The empirically plausible size of the multiplier is obtained by setting a high elasticity of labor supply, which contradicts the evidence from micro data. On the other hand, a higher elasticity of labor supply also creates a larger welfare cost of labor income tax. Although one tends to think that fiscal policy is desirable when the multiplier is larger, it may not be the case, because the welfare cost of distorted labor market is large, too. Under the empirically plausible value of other deep parameters, a counterintuitive result is found. Fiscal stimulus is less likely to be rationalized when the fiscal multiplier is large. The welfare cost due to the elastic labor supply plays a crucial role in determining the necessity of fiscal stimulus.

This result implies that the welfare implication of fiscal policy should be a key factor in calibrating a structural model or in selecting a structural model. The fiscal multiplier in the Real Business Cycle model and the new Keynesian model reflects a movement of the natural level of output, but the contribution of the change in output gap to the multiplier is not significant. This property leads to the above puzzling welfare implication.

JEL Classification Number: E62, H21, H30

Keywords: fiscal policy, marginal cost of public funds, wage elasticity of labor supply