Do Faster Growing Economies Run Current Account Deficits? A Theoretical Reappraisal of the Role of Utility Functions

Doshisha University
Shingo Iokibe

It is well recognized in the literature that economies that have higher output growth prospects run current account deficits and that economies that have slower output growth prospects run current account surpluses. This paper examines the robustness of this hypothesis in a two-country framework from a purely theoretical point of view and finds that the crucial presumption concerns variability in the elasticity of marginal utility with respect to consumption. It also finds that the level of economic development or relative per-capita output to the rest of the world is crucial.

When adopting two-period models, the hypothesis that a country growing relatively faster than the rest of world (the ROW) runs a current account surplus is robust only when the period utility function has a constant elasticity of intertemporal substitution. However, once we assume that period utility functions have a variable elasticity of marginal utility, the hypothesis does not always hold. If we assume a utility function of which the elasticity of marginal utility increases with respect to consumption, less developed countries that grow faster compared with the ROW, can then run current account surpluses under selected conditions.

From a theoretical perspective, the present study shows that the sign of the current account in consumption-saving models depends solely on the relative magnitude of the intertemporal marginal substitution rate of consumption of the home country to the foreign country. Moreover, the marginal substitution rate is determined solely by the consumption growth rate and is unaffected by the initial level of consumption if the elasticity of marginal utility is constant. However, the marginal substitution rate is affected by the initial level of consumption as well as by the consumption growth rate if the elasticity of marginal utility is either increasing or decreasing with respect to consumption. These findings demonstrate why the conventional hypothesis cannot always hold when the utility function has a variable elasticity of marginal utility.