Renewable Natural Resources and Money in an Overlapping Generations Economy

Yoshimitsu Kume*

Abstract

This paper analyzes interactions between natural resources and money in an overlapping generations economy. In this model, natural resources are not only essential for production but also used as a means of intergenerational transfers. Thus, the natural resources and money are interpreted as perfect substitutes in asset markets.

If the non-trivial, non-monetary steady state is dynamically inefficient, the monetary steady state where money is positively valued can exist. Money can avert the inefficient use of the resources to some extent. Contrary to the standard neo-classical production economy, the reverse-Mudell-Tobin effect is prevalent. The economy converges to it monotonically and deterministically as if quantities of resources harvested for production are adjusted for the value of money to be positive.

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^{*} E-mail address: kumey@kokushikan.ac.jp