A Generalization on the Analysis of Trade and Environmental Pollution

Nobuhito Suga

Graduate School of Economics, Nagoya University

Abstract

This paper treats a comprehensive analysis of welfare in an open economy where there are two countries, two goods, one factor and the transboundary pollution which is generated by the production activity in the manufacturing sector and gives a damage to the productivity of the agricultural sector. One of our main findings is that both countries can gain from trade irrespective of their production patterns after trade if the transboundary rate of pollution from an agricultural good exporting country is sufficiently large and the nontransboundary rate of pollution in a manufacturing good exporting country is sufficiently small. This result has not been pointed out in the existing analyses with this type of models so far.