Endogenizing Prices in Extended IO Models including Natural Resources

Extended Input-Output models link the income earners with their own specific consumption profile, showing part of the circular flow of income. However, these models consider prices as exogenous, independently if they incorporate demographic characteristics or not. Prices are key parameters in order to estimate the rents obtained in the production process, especially when natural resources like land or water are included in the model. In this specific case, the owners of the production factors (labor, capital, land, water, etc.) correspond with the categories of households. The aim of this paper is to assess how the income distribution is affected by endogenizing prices and rents of the different primary inputs. This article attempts to cover the current gap in the Input-Output literature regarding this topic. Hence, the formulation presented here can be interpreted as a first step in the construction of a theory of value and income distribution following Miyazawa framework, including associated prices and price behavior.

Keywords: Prices, Extended Input-Output model, Income distribution, Production factors