A Nonlinear Supply-Driven Input-Output Model

Topic: Methodological aspects of input-output analysis IV

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ABSTRACT

One of the important limitations of the supply-driven input-output (i-o) Ghosh model concerns its Leontief linear production function. Using the i-o table, this paper replaces a Cobb-Douglas production function with the supply-driven model. The two models are compared both theoretically and empirically. Nonlinear production function, relative substitutability of primary factors, and variability of the proportion of intermediate inputs over product levels are the characteristics of the proposed model. Considering the Solow residual of sectors as the Total Production of Factors (TFP) of sectors, is still another characteristic of the proposed model. The model is also plausible in value added and supply shocks' computation.