

Structural Analysis of the Indian Economy based on Conventional and Modified Input-Output Models

Paramita Dasgupta, Partha Pratim Ghosh and Debesh Chakraborty

This paper attempts to explore structural changes of the Indian economy over the decade of the 1980s through 2006-7, using the Conventional and Modified Input-Output frameworks. Key sectors are identified using weighted backward and forward linkage measures and coefficients of variation. Results based on the Conventional model reveal structural change towards more or less modern production structure of the Indian economy, while that based on the Modified model reflects a mix of traditional and modern industry-oriented production structure. Results based on the Conventional method suggest policies that would focus more on the industrial sector, while those of the modified framework suggest that importance should be given to the traditional as well as modern industrial sectors. Thus, choice of the method of structural analysis for an economy is an important research agenda in the literature on the subject.

I Introduction

The structure of an economy can be analyzed using the input-output methodology developed by Leontief (1951). The concept of inter-industry linkages based on this approach is often used for assessing the impact associated with the growth of a particular sector. Conventionally, the inter-industry linkages are measured within the Leontief Input-Output framework, treating the final demand comprising household expenditure, government expenditure, capital formation and net export as exogenous. The linkages computed in this input-output framework are based on the inter-industry technological relations alone. However, in the developing economies the inter-industry relations are usually found to be relatively less compared with those of the developed countries.¹ In

Paramita Dasgupta, Department of Economics, Ananda Chandra College, Jalpaiguri 735101, West Bengal, India, Email: paramita_dasgupta23@rediffmail.com

Partha Pratim Ghosh, Department of Economics, St. Xavier's College, Kolkata 700016, West Bengal, India, Email: ghoshparthapratim45@gmail.com, rana_prof2001@rediffmail.com

Debesh Chakraborty, Former Professor of Economics, Jadavpur University, Kolkata 700032, West Bengal, India, Email: debesh_chakraborty@hotmail.com

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¹ The proportion of zero cells in the input-output table can be used as a measure of the degree of interdependence among the different sectors of an economy. This proportion is found to be more than 50 per cent for India for the years 1983-1984, 1993-1994, 1998-1999, 2003-2004 and 2006-