

Dynamic Externalities and Regional Growth: Evidence from India

Anand Sharma, Indian Institute of Management, IND
anandsharma@iimahd.ernet.in

Abstract

Using Annual Survey of Industries (ASI) dataset for 11 manufacturing industries and 20 states, this paper tests the relationship between dynamic agglomeration externalities and regional productivity growth in case of India. Two types of dynamic externalities have been proposed for explaining these link– Marshall-Arrow-Romer (M-A-R) specialization externalities and Jacobs’ diversity externalities. This paper examines the effect of these dynamic externalities on regional industrial productivity growth in case of selected Indian manufacturing industries between 2000-1 and 2011-12. The empirical evidence shows that M-A-R specialization externalities have a favorable impact on employment growth, whereas Jacobs’s diversity externalities have no effect. The study also finds that these results change when TFP growth is used for measuring productivity growth. These results support findings of the previous studies that consider employment growth as an unsuitable proxy for productivity growth. The results of this study provide important insights to the policymakers with respect to the relationship between industrial composition and regional productivity growth. Specifically, the findings support the Jacobian view of diversity and their favorable impact on regional growth.

Keywords: Dynamic externalities, regional growth, India

Jel Codes: O18, R3, R12