

Impact of trade liberalization on productivity growth of manufacturing sector: evidence from a non-parametric approach with Indian data

Topic: Productivity and efficiency II

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This paper explains the impacts of trade liberalization and some technological-socio-economic variables on total factor productivity growth of 18 Indian manufacturing industries. Productivity growth is measured by Malmquist Productivity Index, using non-parametric Data Envelopment Analysis. The study highlights intra-industrial differences in total factor productivity growth and reports annual average growth rate as 3.90%, considering all the industry groups together under the period 1980 to 2001. Decomposition of Malmquist Productivity Index reveals that technical change is the prime source of productivity increase. Lowering of tariff and relative adjustment of real effective exchange rate has contributed positively to productivity growth. Out of 18 industries favorable effects of effective protection, import penetration ratio and real effective exchange rate were vividly felt on productivity growth of two, three and three industries respectively. Increase in productivity growth was also felt through increase in firm size, real wage, increase in rate of real wage and lowering of the number of employees relative to worker. The need for undertaking industry-specific policies for promoting productivity growth is thus highlighted.