

Technological Progress, Innovation and Employment: Firm-level Evidence from India's Manufacturing Sector

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Abstract

In an attempt to assess the impact of technology and innovation on employment this paper, based on Indian firm-level data, considers TFPG/technical efficiency and research and development expenditure as two key variables. Relating to TFPG or TE, findings are not indicative of any major decline in employment except in one or two industries. Turning to R&D expenditure, three industries showed a positive effect on employment to sales ratio and it is only one industry for which a negative and significant coefficient is estimated. Hence, it may be erroneous to conclude that the new technology or innovation is geared to cause job loss. Though no large scale evidence is available in favour of net employment gains, labour utilization rate is also not seen to be a negative function of innovation. Domestic innovation may be pursued to develop appropriate technology and the employment potential can be explored in a number of areas.