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Infrastructure, Information & Communication Technology and Firms' Productive Performance of the Indian Manufacturing

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The Make in India program aims at building best-in-class manufacturing set up in the country. However, public infrastructure is considered to be one of the biggest obstacles for the growth of manufacturing in the country. In this context, this paper examines the role of infrastructure and information & communication technology (ICT) on total factor productivity (TFP) and technical efficiency (TE) of the Indian manufacturing sector for the period 1994-2010. We use advanced estimation techniques to overcome problems of non-stationarity, omitted variables, endogeneity and reverse causality by applying fully modified OLS, panel cointegration and System GMM. Estimation results suggest that the impact of infrastructure and ICT is rather strong. Importantly, industries, such as Transport Equipment, Textile, Chemicals, Metal & Metal Products, which are more exposed to foreign competition, are found to be more sensitive to infrastructure endowments. In the light of these findings, policy implications are brought out.

Keywords: India, manufacturing, total factor productivity, technical efficiency, infrastructure, information & communication technology.

JEL classification: L60, H54, O53, O3

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