Urban Transportation Infrastructure and Poverty Reduction: Delhi Metro’s Impact on the Cycle Rickshaw Rental Market

Abstract:
Based on a primary survey of cycle rickshaw pullers and rickshaw owners in Delhi, India, 2010/11, this paper estimates the causal impact of the opening and extension of Delhi Metro on the rental rate of cycle rickshaws. Unskilled, assetless workers who have migrated from rural areas due to poverty use the cycle rickshaw rental market in order to begin the job of rickshaw pulling. A change in this market is thus expected to affect both urban and rural poverty. Controlling for unobservable area characteristics by the information on house tax, we identify the causal impact using the different timing of the opening of Metro stations. The regression results indicate that out of a 16 percentage point increase in the rental rate per 10 kilometers associated with reduction in the distance to a Metro station, approximately three points could be attributable to the causal effect. In other words, Delhi Metro has increased the demand for cycle rickshaw services, which could be termed as a pro-poor consequence of the infrastructural investment.

Keywords: urban poverty, migration, infrastructure, informal sector, India.

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