Highways and Convergence - New Economic Geography Empirics

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22.11.2021

Abstract

This paper estimates the impact of highways on the distribution of income between metropolitan and non-metropolitan areas in the European Union. Expansion of highway network can affect the balance between centripetal and centrifugal forces, thus, stimulating or diminishing the incentives towards geographic concentration. I use a comparative growth accounting method based on an augmented Cobb-Douglas production function to measure which of these forces dominate as highway endowment increases. A conditional IV design exploiting 1-4 years lagged fatalities in road accidents is implied to emphasize the estimations' reliability given potential endogeneity concerns. For my analysis, I build a new unbalanced panel using yearly disaggregated data collected from Eurostat considering the period of 2000-2017. The results suggest that highways stimulate convergence in a 59.22 km range around metropolitan areas. The discrepancy would have been 0.88%-0.95% higher in 2018 if no highways had been built since 2000. The results are robust considering the implied reliability test, different model and sample specifications.

Keywords: Regional growth, highways, core – periphery outcomes, urban decentralisation, European Union

JEL classification: H54, O18, O47, R11, R12

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