Transportation Infrastructure and Regional Development in China: A Meta-Analysis

Zhenhua Chen[a] and Kingsley E. Haynes[b]

Abstract
Transportation infrastructures in China including highways, railroads, aviation and ports have experienced unprecedented evolutions over the last two decades due to the implementation of an ambitious public infrastructure investment policy. With the gradual completions of various transportation infrastructure systems, the interest of understanding the economic benefits of transportation investment has rising substantially which thus stimulates the empirical evaluations on this theme. Although extensive empirical studies have been conducted with a wide range of evidences, the impact of transportation infrastructure on regional development vary substantially due to different research focus and design, which makes the understanding rather inconclusive.

This study aims to provide a comprehensive understanding of the Chinese transportation infrastructure and the role it plays on regional development using a meta-analysis. Our investigation is based on a statistical review of over 30 empirical studies with a focus on the transportation system in China. Our analysis will reveal the effects of various determinants from both research designs and regional characteristics on the output estimation of transportation infrastructure's economic contribution. The study will help transportation planners and policy makers in China to gain a comprehensive understanding of the impacts of the transportation infrastructures.

Keywords: Transportation infrastructure, Regional Development, China, Meta-analysis

a. Sol Price School of Public Policy, University of Southern California, 322RTH, 3710 McClintock Ave, Los Angeles, CA, 90089, USA
b. School of Policy, Government, and International Affairs, George Mason University, 3351 Fairfax Drive, Arlington, VA, 22201, USA