

The Impact of Infrastructure Investments on Regional Economic Performance: A Meta-Analysis

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Today, the notion of regional competition shapes regional economic policies, and these policies improve regions' competitive power, in addition to channelizing the resources into the underdeveloped regions and supporting some of the activities in underdeveloped regions. Infrastructure investments, which can be evaluated as among these policy instruments, can be a determining factor in the choice of the facility location and can increase the output as well as private sector investments through increase in private capital and labour productivity. Furthermore, increase in public infrastructure investment expenditures will promote the demand through the multiplier impact in the short term and price decreases caused by the productivity improvement in infrastructure investments in the long term; this demand impact will cause an increase in the whole production and employment. At the same time, public infrastructure investments afford cities, regions, and nations the opportunity to improve their competitive structures, due to the fact that they are able to decrease transportation and production costs.

Gramlich (1994: 1177) defines infrastructure investments as natural monopolies that require large capital intensity, such as highway and other transportation means, water and drainage lines, and communication systems and also alternatively defines and stresses that it is necessary to focus on the tangible capital stock possessed by the public sector. The expanded version of this definition also includes human capital as well as research and development investments. These types of infrastructure investments enable public policies to influence the long-term growth and productivity at the regional level. Particularly following the study of Aschaur (1989), many studies have been done in order to determine the impacts of different infrastructure types on national and regional economic growth by using various ways and methods. Some of these studies, that

were done particularly since 1990s, mentioned that economic and social infrastructure investments directly impact (or indirectly impact through externalities) regional output, private sector investments, costs, and employment. Studies also showed that these investments increased the competitive power of regions.

In this study, the impact of infrastructure investments on regional economic performance has been investigated by using the meta-analysis methodology. Meta-analysis is a method used for quantitatively aggregate primary research studies in a particular field. A large collection of primary studies from a particular body of literature is surveyed in accordance with predefined coding protocols and procedures. Studies included in a meta-analysis need to be empirical and should examine similar and/or same constructs and relationships. In the current study, we have examined the relationship between infrastructure investments and regional economic performance thus included the studies that examined this relationship. In order to identify the sample of primary studies, we have initially searched the bibliography of previously published review studies on the same topic. We have also searched online databases for identifying the sample papers. This process yielded 87 numbers of studies, which were then reduced to 70 due to the inadequate data. The papers will be coded based on certain study characteristics, and then the data analysis will be done using SPSS statistical software package.

Keywords: Public Infrastructure Investments, Private Investments, Regional Income, Regional Economic Performance, Meta-Analysis.