The purpose of this paper is to estimate the effect of public infrastructure on the cost structure of European Union (EU) countries and provide an empirical estimate of the rates to return to public infrastructure investment. Using data on transportation, communication, fuels and energy, waste management and water supply expenditures for 27 European countries and for the period 1996 to 2014, we find a significant inducing cost saving from public infrastructure capital stock in all the countries of our analysis. In addition, we calculate the rate of return to public infrastructure and provide evidence of under or over investment of public infrastructure of the EU Member States. The calculated rates of return indicate that all countries benefit from investment in public capital, however the results suggest that Member States, Cyprus for instance, in which the stock of infrastructure is low could benefit more from a well-targeted higher infrastructure investment.

Keywords: infrastructure, translog cost estimation, elasticities, rates of return