ACCESSIBILITY IN THE REGIONAL CGE FRAMEWORK — SHORT AND LONG TERM EFFECTS OF TRANSPORT INFRASTRUCTURE INVESTMENT IN POLAND

Topic: CGE & Transport
Author: Bartłomiej Rokicki
Co-Authors: Marcin Stepniak

Since its EU accession, Poland has invested strongly in development of fast road transport network. As a result, the total length of modern, high-speed roads has increased from around 500 km in 2004 to almost 3000 km in 2014. Yet, while the positive impact of transport infrastructure investment on overall accessibility is unquestionable there are no studies that assess its influence on economic development of particular regions.

This paper applies regional dynamic CGE model to measure the effects of big transport infrastructure investment between 2004 and 2014 in Polish NUTS2 regions. We use the data on both investment spending and accessibility improvement (expressed as a reduction in travel time) in order to distinguish possible short and long term impacts. Based on counterfactual analysis, we find that while positive these impacts are highly nonlinear and differ strongly across the regions.