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DOES THE GRAVITY MODEL WORK FOR THE MODELLING OF MIGRATION BETWEEN EUROPEAN COUNTRIES FROM 2011 TO 2014?

Abstract:

The gravity model is an interesting adaptation of Newton's law of gravitation, in which the effect of gravity is used to describe the spatial interactions between economic units. The force of interaction is supposed to be positively influenced by the size of the units (the push factor) and negatively by the distance between them (the pull factor). The model is used to estimate the dependence of migration on the GDP, as well as the distance between European countries. Based on the gravity model, the GWP of both (source and host) countries, is expected to be a push factor and the distance is expected to be a pull factor. However, in economic theory, the impact of the GDP of a source country is expected to be negative, the opposite to the gravity model. The goal of the paper is to test which of the two is valid for eight European countries from 2011 to 2014.

Keywords:

gravity model, spatial dependence, migration, model selection, random effects, panel data

JEL Classification: F22, C23, C52