

LABOUR ACCESSIBILITY AND RESIDENCE ATTRACTIVENESS: A BAYESIAN ANALYSIS BASED ON SPATIAL INTERACTION MODELS

Maria Pilar Alonso¹, Asuncion Beamonte², Pilar Gargallo³ Manuel
Salvador⁴

SUMMARY

In this work we use a Poisson interaction gravity model with spatial effects that allows us to joint measure the labour accessibility and the residence attractiveness of a BSU, distinguishing between the attractiveness and impedance components. The estimation process of the model is carried out using Bayesian tools based on the use of auxiliary mixture sampling. For illustration purposes, the methodology is applied to a dataset containing information of commuters from the Spanish region of Aragon.

Keywords: Labour accessibility, Residence attractiveness, Commuting, Auxiliary mixture sampling, Bayesian inference, Spatial interaction models

AMS Classification: 62F15, 62H11, 62P25

¹Facultad de Geografía. Universidad de Lleida
p.alonso@geosoc.udl.cat

²Facultad de Economía y Empresa. Universidad de Zaragoza
asunbea@unizar.es

³Facultad de Economía y Empresa. Universidad de Zaragoza
pigarga@unizar.es

⁴Facultad de Economía y Empresa. Universidad de Zaragoza
salvador@unizar.es