Gravity Based Estimation of Interregional Transactions with Monte Carlo RAS Proportioning

Topic: Regional input-output modeling V
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This paper describes an alternative nonsurvey method for estimating interregional (Isard type) transactions. Domestic outflows are assigned by delivering biregional transactions on the basis of the gravity ratio between the origin and the destinations, with parameters estimated from an earlier survey on interregional transactions. The estimated gravity parameters are further perturbed in order to meet the aggregate transactions that are given for other regions to be investigated. The methodology is applied to the interregional table for China 2007, first estimating the gravity ratio, and then to re-calculate the interregional transactions with the perturbation and shifting of the gravity parameters with respect to their means and variances.