METHODS AND MODELS IN SPATIAL ECONOMETRICS. A REVIEW

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- ABSTRACT: This paper presents a discussion on several econometric techniques for estimation of parametric models in the presence of spatial dependence, for cross-section data. We focus initially on spatial dependence models with spatial lags for the response variable or spatial lags for the equation residuals; estimation is done by maximum likelihood methods. We also present a critical analysis of the pitfalls that come up when using these spatial lag models. The paper also brings a discussion on tests for detection of the presence of spatial dependence. Finally, we discuss more robust estimation methods, which account for endogeneity in some of the explanatory variables.
- KEYWORDS: Spatial econometrics; spatial dependence; cross-section data.

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