

Spatial Panels
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This paper considers spatial dependence across panels. Spatial dependence models --- popular in regional science and urban economics --- deal with spatial interaction and spatial heterogeneity, see Anselin (1988, 2001) and Anselin and Bera (1998) for a nice introduction to this literature. The structure of the dependence can be related to location and distance, both in a geographic space as well as a more general economic or social network space. Section 2 introduces the spatial error component regression model and the associated methods of estimation in these models including maximum likelihood and generalized method of moments. Section 3 nests two popular spatial panel models in an encompassing spatial error component model and discusses several tests for this model. Section 4 discusses prediction in the context of spatial panel models, while Section 5 studies the performance of various panel unit root tests when spatial correlation across the panel is present. Section 6 gives some recent developments in this area and further thoughts for future research.