Record Nr. UNINA9910337680903321 Autore Beenstock Michael Titolo The Econometric Analysis of Non-Stationary Spatial Panel Data [[electronic resource] /] / by Michael Beenstock, Daniel Felsenstein Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-03614-6 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (280 pages) Collana Advances in Spatial Science, The Regional Science Series, , 1430-9602 Disciplina 330.015195 Soggetti **Econometrics** Regional economics Spatial economics **Statistics** Regional/Spatial Science Statistics for Business, Management, Economics, Finance, Insurance Econometria Anàlisi de sèries temporals Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references. Nota di contenuto 1 Space and Time are Inextricably Interwoven -- 2 Time Series for Spatial Econometricians -- 3 Spatial Data Analysis and Econometrics --4 The Spatial Conectivity Matrix -- 5 Unit Root and Cointegration Tests in Spatial Cross-Section Data -- 6 Spatial Vector Autoregressions -- 7 Unit Root and Cointegration Tests for Spatially Dependent Panel Data -- 8 Cointegration in Non-Stationary Panel Data -- 9 Spatial Vector Error Correction -- 10 Strong and Weak Cross-Section Dependence in Non-Stationary Spatial Panel Data. . Sommario/riassunto This monograph deals with spatially dependent non-stationary time series in a way accessible to both time series econometricians wanting to understand spatial econometics, and spatial econometricians lacking a grounding in time series analysis. After charting key concepts in both time series and spatial econometrics, the book discusses how the spatial connectivity matrix can be estimated using spatial panel data

instead of assuming it to be exogenously fixed. This is followed by a discussion of spatial non-stationarity in spatial cross-section data, and a full exposition of non stationarity in both single and multi-equation contexts, including the estimation and simulation of spatial vector autoregression (VAR) models and spatial error correction (ECM) models. The book reviews the literature on panel unit root tests and panel cointegration tests for spatially independent data, and for data that are strongly spatially dependent. It provides for the first time critical values for panel unit root tests and panel cointegration tests when the spatial panel data are weakly or spatially dependent. The volume concludes with a discussion of incorporating strong and weak spatial dependence in non-stationary panel data models. All discussions are accompanied by empirical testing based on a spatial panel data of house prices in Israel. .