

MASTER SEMINAR “APPLIED SPATIAL ECONOMETRICS” SOSE 2018

Dr. Katarina Zigova, office: F231, katarina.zigova@uni-konstanz.de

Overview

In this seminar we study, present and discuss spatial econometric applications from different fields of economics. Spatial econometrics as a subset of econometrics dates back to 1970s and is concerned with spatial aspects present in cross-sectional and space-time observations (Anselin 2010). In the introductory lecture students will acquire basic understanding of spatial econometrics, its models, methods and delineation from classical econometrics. In the follow-up presentation sessions students are expected to present a paper based on their choice from the list of topics below.

Prerequisites

Ideally you have passed Statistics I, II, and Econometrics I courses. Interest in applied econometrics and/or statistics.

Time schedule

- Kickoff meeting: Wednesday 18.4.2018, 10-11, room V0738
- Introductory lecture: Wednesday 25.4.2018, 10-13, room V0738
- 4 student presentation blocks: 9.5.2018 (room V0837), 17.5.2018 (room H0244), 6.6.2018 (room G0203), 13.6.2018 (room G0203), always 10-13

Assessment

- Presentation
- Own review paper including the formulation of an own research idea (deadline: August 31st 2018)
- Participation (obviously active participation is preferred)

Recommended literature

Anselin L. (2010) Thirty Years of Spatial Econometrics, *Papers in Regional Science*, 89(1): 3-25

Elhorst, J. P. (2010) Applied Spatial Econometrics: Raising the Bar, *Spatial Economic Analysis*, 5(1): 9-28

LeSage J. P., R. K. Pace (2009) *Introduction to Spatial Econometrics*, CRC Press, Boca Raton

Topics

Select three topics close to your interest and send me them per email by 15th of April 2018. I will try to assign everyone to one of the selected topics. We discuss the student-topic/paper pairs during the kickoff meeting.

1. Labor Economics

- Elhorst J. P., A. S. Zeilstra (2007) Labour Force Participation Rates at the Regional and National Levels of the European Union: An Integrated Analysis. *Papers in Regional Science*, 86: 525-549
- Elhorst J. P., A. S. Zeilstra (2014) Integrated Analysis of Regional and National Unemployment Differentials in the European Union. *Regional Studies*, 48(10): 1739-1755

2. Public Economics

- Allers, M. A., J. P. Elhorst (2005) Tax Mimicking and Yardstick Competition Among Local Governments in the Netherlands. *International Tax and Public Finance*, (12)4: 493-513
- Terra R., E. Mattos (2017) Accountability and Yardstick Competition in the Public Provision of Education. *Journal of Urban Economics*, 99: 15-30

3. Health Economics

- Filippini M., F. Heimsch, G. Masiero (2014) Antibiotic Consumption and the Role of Dispensing Physicians. *Regional Science and Urban Economics*, 49: 242-251
- Turi K. N., D. S. Grigsby-Toussaint (2017) Spatial Spillover and the Socio-ecological Determinants of Diabetes-related Mortality Across US Counties. *Applied Geography*, 85: 62-72

4. Innovation/Spillovers

- Fischer M. M., D. A. Griffith (2008) Modeling Spatial Autocorrelation in Spatial Interaction Data: An Application to Patent Citation Data in the European Union. *Journal of Regional Science*, 48: 969-989

5. Real Estate Economics

- Baltagi B. H., B. Fingleton, A. Pirotte (2014) Spatial Lag Models with Nested Random Effects: An Instrumental Variable Procedure with an Application to English House Prices. *Journal of Urban Economics*, 80: 76-86
- Jeanty P. W., M. Partridge, E. Irwin (2010) Estimation of a spatial simultaneous equation model of population migration and housing price dynamics. *Regional Science and Urban Economics*, 40: 343-352

6. Growth and Regional Convergence

- Dall'erba S., J. Le Gallo (2008) Regional convergence and the impact of European structural funds over 1989-1999: A spatial econometric analysis, *Papers in Regional Science*, 87(2): 219-244
- Ertur C., W. Koch (2007) Growth, Technological Interdependence and Spatial Externalities: Theory and Evidence. *Journal of Applied Econometrics*, 22(6): 1033-1062

7. Environmental Economics

- Cheng Y., Z. Wang, X. Ye, Y. D. Wei (2014) Spatiotemporal Dynamics of Carbon Intensity from Energy Consumption in China. *Journal of Geographical Sciences*, 24(4): 631-650

8. Economics of Science

- Elhorst, J. P., Zigova K. (2014) Competition in Research Activity among Economic Departments: Evidence by Negative Spatial Autocorrelation. *Geographical Analysis*, 46: 104-125