

IP648 Regional Economic Analysis

SYLLABUS – SPRING 2006

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COURSE FORMAT

Lecture: Tuesday 2:00-3:50

Office Hours: Wed-Thu 2:30-5:00PM

Virtual Classroom: Check the course conference on First Class daily, for weekly changes and additions regarding syllabus, homework, datasets, and assignments. Once the information has been published, I will assume that you are aware of the changes or additions.

Required Readings: The main source of assigned readings is the course reader. The reader and other suggested readings are on reserve at the MIIS library. A source of complementary readings is the book by Armstrong, H & Taylor, J. Regional Economics and Policy (Blackwell, 2001), also available at the MIIS library. Required chapters are included in the reader. Other readings will be distributed over time.

COURSE DESCRIPTION AND OBJECTIVES

DESCRIPTION

This seminar examines the spectrum of economic analysis techniques used to assess sub-national/regional economic performance, as well as interdependencies among economic sectors and actors. The wide range of methods varies from simple Economic Base Models to the latest and most sophisticated Applied General Equilibrium models.

OBJECTIVES

At the completion of the seminar, students will understand the basis of the quantitative methods most commonly used in analyzing regional economic performance. Although the focus of the lectures is on the United States and Europe, the methodological approaches presented in the class are of universal application. Students are encouraged to analyze cases in other developed and developing countries.

REQUIREMENTS AND GRADING

A successful seminar requires extensive and intense student participation. I adhere to this assumption and it is reflected in the grading scheme, with preparation, participation and presentations accounting for more than half of the course final grade.

ASSIGNMENTS

Weekly: Each week one or two students will be responsible for preparing a summary/outline of the readings for that class which will serve as a guide for the discussion (2nd half of the class) following the lecture by the

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instructor (1st half of the class). Additional assignments can consist of summaries of required readings and will be assigned for the most relevant methods.

Final: Each student will present an essay discussion on any of the methods reviewed in class. It can be structured as a comparison between the assumptions of two or more methods; or as an analysis of an empirical study found in the literature (other than the included readings); an optimal case would be the analysis of two empirical cases about the same region, or the same industry, or the same problematic. The student must evaluate the relevance of the data used with respect to the requirement of the method, the pertinence of the assumptions and the significance of the findings. This is designed as a tool to help students become familiar with the major journals and publications in the field, the current methodological approaches, and the form in which results are presented.

GRADING SCHEME

Term Paper (includes final presentation)	40%
Reading Summary/ies	35%
Preparation and Participation	25%

PLAN

WEEK 1 (JAN 24): INTRODUCTION. QUANTITATIVE POLICY ANALYSIS.

Rationales for government intervention.
Efficiency and non-efficiency oriented interventions.
Criteria for policy evaluation: Welfare - Political feasibility.
Basic techniques: models and scenarios.

WEEK 2 (JAN 31): ECONOMIC ACTIVITY AND EMPLOYMENT ANALYSIS.

The Economic Base Model.
Basic and non-basic sectors.
Multisectorial Extension of the Economic Base Model.

Readings:

- 1- Armstrong and Taylor- Chapter 1 “Regional Income and Employment Determination.”
- 2- Oppenheim, Norbet. Applied Models in Urban and Regional Analysis. New Jersey: Prentice-Hall, 1980. Chapter 3.
- 3- Klosterman, Richard. Community Analysis and Planning Techniques. Savage, Maryland: Rowman & Littlefield Publishers, 1990. Chapter 9 & 13.

WEEK 3 (FEB 7): LOCATION AND DEVELOPMENT.

Industrial Location.
Precursors: J. H. Von Thunen, A. Webber, W. Alonso.
Location Quotient.
Forces transforming the industrial landscape: technology, transportation, electronic communications.
Determinants of firm location.

Readings:

- 4- Armstrong and Taylor- Chapter 3 “Regional Growth Disparities: Neoclassical Perspectives.”

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- 5- Armstrong and Taylor- Chapter 4 “Export Demand Models, Agglomeration and Cumulative Growth Process.”
- 6- Storper, Michael. The Regional World Chapter 6 “Regional Worlds of Production: Conventions of Learning and Innovation in the Technology Districts of France, Italy and the United States.”
- 7- Isserman, Andrew. "The Location Quotient Approach to Estimating Regional Economic Impacts." Journal of the American Institute of Planners 43: 33-41. 1977.
- 8- Hildebrand, George and Mace, Arthur. "The Employment Multiplier in an Expanding Industrial Market: Los Angeles County, 1940-47." Review of Economics and Statistics 32: 241-49. 1950
- 9- Krugman, Paul. Geography and Trade. Cambridge: MIT Press. 1996. Chapter 2.

WEEK 4 (FEB 14): SHIFT-SHARE. OTHER APPROACHES: MINIMUM REQUIREMENTS AND CONSTANT-SHARE

Readings:

- 10- Isserman, Andrew. *Estimating Export Activity in a Regional Economy: A Theoretical and Empirical Analysis of Alternative Methods*. International Regional Science Review. 5,2: 155-184 (1980).
- 11- Fothergill, S. and G. Gudgin. *In defense of shift-share*. Urban Studies 16:309-319 (1979).
- 12- Rigby, David. *The Impact of output and productivity changes on manufacturing employment*. Growth and Change. Fall 1992: 405-427.

WEEK 5 & 6 (FEB 21 & FEB 28): INPUT-OUTPUT MODEL.

The Input-Output Model.
 Multiregional Version of the I/O Model.
 Multipliers (employment, output, value added)
 Direct, Indirect, and Induced effects.
 Interpretation, extension, and limitations of I/O modeling.
 Dynamic Models.

A&T Chapter 2

Readings:

- 13- Armstrong and Taylor- Chapter 2 “The Input-Output Approach to Modelling the Regional Economy.”
- 14- Isard, Walter. Methods of Regional Analysis. MIT Press: Cambridge: 1960. Chapter 8.
- 15- Sadoulet, Elizabeth and de Janvry, Alain. Quantitative Development Policy Analysis. John Hopkins University Press, Baltimore: 1995. Chapter 10.
- 16- Treyz, George. Regional Economic Modeling. Kluwer Academic Publishers, Boston: 1993. Chapter 6
- 17- McCann, Phillip and Dewhurst, John. "Regional Size, Industrial Location and Input-Output Expenditure Coefficients". Regional Studies 32,5:435-444 (1998).

WEEK 7 (MAR 7): SOCIAL ACCOUNTING MATRIX. AN EXTENSION OF I/O METHODS.

Introduction.
 What is a SAM?
 SAM approach to modeling.
 Data requirements.

Readings:

- 18- Same as item #15.
- 19- Pyatt, Graham. *A SAM Approach to Modeling*. Journal of Policy Modeling. Vol 10 No3 Fall 1988:327-353.

WEEK 8(MAR 14): NO CLASSES – SPRING BREAK.

WEEK 9 (MAR 21): COMPUTABLE GENERAL EQUILIBRIUM (CGE) MODELS. APPLICATIONS TO INTERREGIONAL/INTERNATIONAL TRADE.

Structure.
Macroeconomics.
Construction.
Examples.
When to use CGE models?
Discussion of examples for NAFTA, and other blocs.

Readings:

- 20- Sadoulet, Elizabeth and de Janvry, Alain. Quantitative Development Policy Analysis. John Hopkins University Press, Baltimore: 1995. Chapter 12.
- 21- Spencer, J. E. *Computable General Equilibrium, Trade, Factor Mobility, and the Regions*. in Harrigan, F. and McGregor, P. G. Recent Advances in Regional Economic Modeling. London: Pion, 1988
- 22- Taylor, J. Edward. Village Economies : The Design, Estimation, and Use of Villagewide Economic Models. Cambridge University Press, 1996. BOOK on Reserve MIIS Library.
- 23- Bergman, Lars. *Energy Policy Modeling: A Survey of General Equilibrium Approaches*. Journal of Policy Modeling 10, 3: 377-400 (Fall, 1988).
- 24- Civardi, Marisa and Lenti, Renata. *The Distribution of Personal Income at the Sectoral Level in Italy: A SAM Model*. Journal of Policy Modeling 10, 3: 377-400 (Fall, 1988).

WEEK 10 (MAR 28): CLUSTER ANALYSIS.

Local economic development vs. business-oriented approaches.
Consulting reports.
Theoretical Basis.

<p>DEADLINE FOR SUBMITTING FORMAL PROPOSAL FOR FINAL PAPER.</p>
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Readings:

- 25- Scott, Allen Metropolis Chapter 3 “The Logic of Industrial Production.”
- 26- Ibid... Chapter 4 “Agglomeration Process and Industrial Complex Formation.”
- 27- Anderson, Gary. *Industry Clustering for Economic Development*. Economic Development Review. 1994, 12(2): 26-32.
- 28- Amin, Ash. *An Institutionalist Perspective on Regional Economic Development*. International Journal of Urban and Regional Research. 1999, 23(2):365-378.
- 29- Porter, Michael. *Location, Competition, and Economic Development: Local Cluster in a Global Economy*. Economic Development Quarterly. 2000, 14(1): 15-34.
- 30- Buss, Terry. *The Case Against Targeted Industry Strategies* (and following discussion). Economic Development Quarterly. 1999, 13(4): 339-371.
- 31- Marcelli, Enrico, et al. Planning for Shared Prosperity or Growing Inequality? Center on Policy Initiatives, San Diego: 2000. BOOKLET on Reserve MIIS Library.
- 32- Maskell, Peter. *Knowledge Creation and Diffusion in Geographic Clusters: Regional Development Implications*. Working Paper 2001-4. Center for Economic and Business Research, Copenhagen: 2001.
- 33- Norman, Victor. and Venables, Anthony. *Industrial Clusters: Equilibrium, Welfare, and Policy*. Working Paper CPER. September 2001.

WEEK 11 (APR 4): SPATIAL MODELS.

Basic models: Gravity Models.

Potential Models.

Advanced: Latest development: GWR Models (Geographically Weighted Regression).

Readings:

34- Armstrong and Taylor- Chapter 10 “Indigenous Development: Small and Medium Enterprise and Technological Progress.”

35- Oppenheim, Norbet. Applied Models in Urban and Regional Analysis. Prentice-Hall, New Jersey:1980. Chapter 4.

36- Harris, C. C. *From General Spatial Equilibrium Theory to Multiregional Operational Models* in Harrigan, F. and McGregor, P. G. Recent Advances in Regional Economic Modeling. London: Pion, 1988.

PART II – REGIONAL POLICIES

WEEK 12 (APR 11): REGIONAL POLICIES IN THE UNITED STATES.

37- Mills, E. and Hamilton, B. Urban Economics Chapter 1 “The Nature of Urban Areas.”

38- Ibid... Chapter 2 “Comparative Advantages and Regions.”

39- Landabaso, Mikel. *Reflections in U.S. Economic Development Policies: Meeting the New Economy*. Draft for publication. Chapel Hill, December 2000.

WEEK 13(APR 18):

We’ll use this week as the **ADJUSTMENT WEEK**.

The tentative topic is Regional Policies in the European Union. The British Case. Readings will be assigned/distributed in advance.

WEEK 14&15 (APR 25 & MAY 2): STUDENT’S PRESENTATIONS.

WEEK 16 (MAY 9): REVIEW AND CLOSING. COURSE EVALUATION

TERM PAPER DUE: TUESDAY MAY 11TH @ 5:00PM

NO LATER SUBMISSION WILL BE ACCEPTED