

Professor Iwan J. Azis
CRP 512 Sec.01
Spring 2006

Public and Spatial Economics for Planners

Time: Friday 10:10– 12:00 pm

Place: West Sibley Hall, Room 101

Office hours: Friday 13.00-15.00, West Sibley Hall 213 (255-4271)

Tuesday 14.50 – 16.50, Sage Hall 338 (255-7207)

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Course Description

The course is designed to enable students develop their abilities to use analytic frameworks in the formulation and assessment of public policy in the area of economics and spatial analysis. For each topic, the basic economic concept and a variety of techniques including those that incorporate uncertainties, asymmetric information, and dynamic elements will be explained before applying them for policy analysis.

For understanding public policy, it is important at the outset to have a good knowledge about the behaviors and decisions made by individuals or economic agents (e.g., government, consumers, producers, traders, exporters, and importers) who can either affect or be affected by the policy. The decisions of interest are with regards to production, factors costs and employment, wages, prices, and location. It is also important to understand the distinction between private and public goods. The demand and supply behaviors as well as the characteristics of those two are different. Understanding agents' behaviors is the main ingredient of **microeconomics** and partial equilibrium analysis. For public policy, however, it is the welfare of all or most agents (society), not of individual agents, which matters most. Thus, the concepts of social welfare and general equilibrium become relevant.

Policy makers are often concerned with the impacts of agents' behaviors and of particular policies on regional and national economies. There is a variety of multiplier techniques that can be used to capture such impacts, the most common of which is the aggregate demand (AD)-based multiplier, which is a basic topic in **macroeconomics**. The fusion of micro and macroeconomics for public policy is also evident from the supply side, i.e., the aggregate supply (AS) can be influenced by the individual agent's supply. Having understood the regional and national impact, and by taking into account the various possible trade-offs and constraints (e.g., institutional, financial, technological, political), alternative public policies can subsequently be explored.

The allocation of public expenditures and the financing of them, e.g., through taxes, always have a critical role in public policy. In essence, public policy deals with the question of how to allocate scarce resources, given the goal criteria and the constraints. The determinants and dynamics of public finance will be discussed using the examples of the U.S and other countries' cases.

It is often the case that the relevant elements involved in public and spatial policies are intangible in nature. To deal with such a situation, particular techniques that are practical and useful for comparing the importance of those elements are needed. One of such techniques will be introduced in class.

Prerequisites

An understanding of intermediate micro and macro economics, and some quantitative techniques (elementary calculus, optimization and matrix operations or equivalent) would be most ideal. However, for those students lacking such background, there will be separate sessions reviewing the subjects. In addition, there will be also lab sessions to discuss in more details what has been explained in class, the homework assignments, and the use of relevant computer software.

Grading

Homework assignments: 20% of grade
Midterm exam, in-class: 40% of grade.
Final exam, in-class: 40% of grade.

Text and Readings

No required reading. As long as students follow and understand well the lectures given in class, they should do fine. For those who wish to explore further and to understand each topic in more details, the readings list below can be useful. Additional materials will be announced in class, and we will also draw on current news articles related to public policy from time to time.

There are several good introductory economics textbooks available in the market. It is up to the students which books to select. The following two are good examples: *Essentials of Economics* by N. Gregory Mankiw, Harcourt College Publisher (third edition), 2004; and *Foundations of Economics*, by David Begg, Stanley Fischer, and Rudiger Dornbusch, McGraw-Hill UK, 2000. Note also that there are some textbooks and related materials available (downloadable) from the website. For example, <http://nova.umuc.edu/~black/pageg.html> provides tutorial and review materials on micro and macro principles, international economics, and money and banking.

For intermediate level, <http://elsa.berkeley.edu/users/mcfadden/prodecon1.html> which is prepared by, among others, the Nobel-prize winner Daniel L. McFadden, focuses on production economics. Another good source is *Microeconomic Theory*, Oxford

University Press, 1995 by Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green. A slightly more sophisticated yet a classic one is by Hal Varian, *Microeconomic Analysis*. New York: W.W. Norton, 1978. For intermediate macroeconomics, the book by Andrew B. Abel and Ben S. Bernanke *Macroeconomics*, Addison Wesley 2001 is among the good ones. Expositions of issues and concepts of public finance and public economics in general can be found in a book by Anthony Atkinson and Joseph Stiglitz, *Lectures on Public Economics*, McGraw-Hill, 1980. A much less quantitative-oriented book is by Lee Friedman, *The Microeconomics of Public Policy Analysis*, Princeton University Press, 2002.

The regional impact analysis and selected concepts of urban economics and location theory can be read in *Urban and Regional Economics*, Oxford University Press, 2001, by Phillip McCann. Two excellent references on the role of institutions in analyzing the impact of public policies are: *Institutions, Institutional Change and Economic Performance*, by Douglass C. North, Cambridge University Press, 1990; and *Institutions, Transitions Economies, and Economic Development*, by Timothy J. Yeager, Westview Press, 1999.

Some of the books cited above use a mathematical approach. For those who are interested with mathematical derivations of economic concepts, the book by Eugene Silberberg, *The Structure of Economics: A Mathematical Analysis*, Second Edition, New York: McGraw-Hill, 1990, is a good source. Another good reference for quantitative approach for public policy analysis is by Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis*, W.W Norton & Co, 1978.

One of the decision making techniques used in class is known as the Analytic Hierarchy Process (AHP). It is thoroughly explained in *Decision Making for Leaders: The Analytic Hierarchy Process for Decisions in a Complex World*, New Edition 2001 (*Analytic Hierarchy Process Series, Vol. 2*) by [Thomas L. Saaty](#). A step-by-step approach of how to use such a technique is explained in Iwan Azis & Walter Isard, The Use of the Analytic Hierarchy Process in Conflict Analysis and An Extension, in , *Peace Economics, Peace Science and Public Policy*, Vol 3, No 3, 1996. There are many examples of AHP applications, one of which, dealing with a conflict resolution, is shown in Iwan Azis, Resolving Possible Tensions in ASEAN's Future Trade: Using Analytic Hierarchy Process, in *ASEAN Economic Bulletin*, Vol 12, No. 3, March, 1996.