Public Economics

Module 3, Academic Year 22-23

Timos Athanasiou
New Economic School
timos.ath@gmail.com

Course information

Instructor's Office Hours: TBD

Class Time: TBD

Room Number: TBD

TA: TBD

Course description

The course aims at giving an overview of the main themes that underlie the exercise of public policy. We begin by raising the issue of how the outcomes of public policy should be appraised. Following that we inform the discussion with issues pertaining to incentives and informational asymmetries. The combined force of these two considerations typically shapes public policy. We look at applications involving taxation, pensions and social security, health, education etc.

Course requirements, grading, and attendance policies

Successful completion of Micro I - Micro V sequence is a prerequisite for this course.

The grade will be a combination of the Final Exam (80%) and 3 Home Assignments (20% in total). The final exam will be on closed book format.

Attendance will be recorded but will only matter on the margin.

Makeup exam will be in a format similar to that of the final exam. Home assignment grades do not apply towards the make up exam grade, except, possibly for marginal cases.

Course contents

The course evolves around the following themes:

- Public Finance:The Mirrlees model of non-linear taxation. The linear income tax. The Ramsey rule and the sales tax.
- Social Choice Theory. Measures of inequality aversion and tax reform.
- Income redistribution and the appraisal of social policies. An application on education.
- The theory of provision of Public Goods.
- Externalities. Applications to Health and the Environment.
- Voting theory and applications.

Sample tasks for course evaluation

1. PARETO EFFICIENCY

Let $N = \{1, 2, \ldots, n\}$ be the set of individuals. For each $i \in N$, X_i denotes the consumption set he faces and $\succsim_i$ denotes his preferences over that set. The set $F \subseteq \times_{i \in N} X$ is the set of feasible allocations. We have no information over the properties of $\succsim_i$ (continuity, local non-satiation etc.), aside from the fact that it is complete and transitive. Let P denote the set of Pareto efficient allocations. For each statement below determine whether it is true or false. Briefly explain why.

(1) If $x \in F \setminus P$, then there exists $x' \in P$ such that $x_i' \succ_i x_i$, for each $i \in N$.

(2) If there exists $x, x' \in F$ such that $x_i' \succ_i x_i$ for each $i \in N$, then $x' \in P$.

(3) If $x, x' \in P$, then either $x_k \succ x_k'$, for some $k \in N$, or $x_i \sim_i x_i'$, for each $i \in N$.

(4) If $x \in P$, $x' \in F \setminus P$ and $x_k' \succ_k x_k$, for some $k \in N$, then there exists $x'' \in P$ such that $x_k'' \succ_k x_k$.

2. The Lump-sum tax

Suppose that the economy comprises two individuals, $N = \{1, 2\}$, having identical preferences, but differing with respect to their marginal productivities, with $w_1 < w_2$. Figure 1 depicts an allocation (z_1, z_2) in this economy. The thick curve represents the indifference curve of both individuals through their respective bundle. The straight lines through each bundle represent individual budget lines. Which piece of information that is not conveyed by the figure is required to conclude that the allocation (z_1, z_2) is Pareto efficient? Suppose that (z_1, z_2) is Pareto efficient. Consider the utilitarian and the leximin *Social Welfare Orderings* over allocations in the set $\left(\mathbb{R}_+ \times [0, 1]\right)^2$. Which, if any, between these two SWO would rank (z_1, z_2) above all other feasible allocations?

Course materials

Required textbooks and materials

- Marc Fleurbaey, «Fairness, Responsibility and Welfare», OUP Oxford, 2008.
- J. Gruber, "*Public Finance and Public Policy*", Worth Publishers, 2012.

- M. Feldsetein, A.J. Auerbach, eds, "*The Handbook of Public Economics, Vol. II*", Elsevier

Additional materials

- B. Salanie, "*The Economics of Taxation*", MIT, 2003.

- H.S. Rosen, & T. Gayer, "*Public Finance*", McGraw-Hill/Irwin, 2009.

- Atkinson, A., and J. Stiglitz, "*Lectures on Public Economics*", McGraw-Hill, 1984.

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.