

17P030

3 ECTS

Public Economics II: Equity and Incentives

Overview and Objectives

This course has two distinct parts. The first one looks at equity issues, while the second one deals with incentives.

Equity

Social and economic inequalities are high in the political agenda. Inequality dampens economic development, prevents an optimal accumulation of human capital, and exerts a deleterious effect on basic social indicators such as health, life satisfaction or social trust.

Proper description and diagnosis is key to informing and designing public policy. Global absolute poverty, for instance, has decreased over the last years, while global relative poverty continues increasing. Is global poverty then increasing or not? The Equity block of the course will look at measurement and conceptual issues to provide answers to these questions. We will then use empirical applications to illustrate the relevance of these issues for policy recommendations.

Incentives

Societies want to take social decisions based on the preferences that its members have over the set of social alternatives. But members' preferences are idiosyncratic and private information and, to be used to choose the social alternative, they have to be elicited. A social choice function is a systematic procedure that collects individual preferences and selects a social alternative for each declared preference profile. The content of this part of the course is to study the strategic incentives induced by social choice functions to members of the society when revealing their preferences.

The first objective is to present the general difficulties of aggregating individual preferences and eliciting them truthfully. The second objective is to present alternative ways of overcoming these difficulties when preferences are naturally restricted, and to study examples of social choice functions that are satisfactory from the point of view of the strategic incentives they induce on the members of the society.

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Course Outline

Part I: Equity

1. The measurement of income inequality

Equality of what? Inequality and Distributive justice.

Some basic tools to measuring inequality. Graphical representations (Pen's parade, distribution functions and Lorenz curve) and composite indices (rang, mean relative deviation, coefficient of variation, variance, Gini coefficient and Generalized Entropy Family). Axiomatic approach. Inequality decomposition. Inequality and welfare. Dominance approach. Social welfare functions and its relation to distributive justice. Empirical choices that matter: defining welfare, equivalence scale and unit of analysis.

2. The measurement of economic poverty

Key issues in the measurement of poverty: identification and aggregation. Approaches to setting the poverty threshold: absolute and relative poverty. Poverty indices: the FTG family. TIP Curves and poverty dominance. Subjective poverty. Relative deprivation and social exclusion.

3. Economic mobility

Relationship between static (inequality) and dynamic (mobility) approaches. What do we mean by mobility? The many facets of mobility. The many ways to measuring income mobility.

4. Equality of Opportunity

Equality of Outcome vs. equality of opportunity. Responsibility, Circumstances and Luck. Measuring approaches: direct vs. indirect, and ex-ante vs. ex-post. Revisiting the inequality-growth relationship.

5. Redistributive Effects and Progressivity

Vertical equity and progressivity of income tax systems and benefits. Concepts and tools to measure progressivity. Distance to proportionality. Redistributive effects of taxes and transfers.

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Part II: Incentives

1. Social Welfare Functions

Social Choice: Aim and Properties. The Condorcet Paradox. The Borda Count. Arrow's Impossibility Theorem.

2. Social Choice Functions

Incentives: Strategy-proofness. Gibbard-Satterthwaite Impossibility Theorem. Possibilities: Nash Implementation and Domain Restrictions.

3. Domain Restrictions: The Public Good Case

Single-peakedness and Median Voters. Separability and Voting by Committees.

4. Domain Restrictions: The Private Good Case

Single-peakedness and the Division Problem. Quasi-linear Preferences: Auctions and Pivotal Methods. The Assignment of Indivisible Objects: The Top-trading Cycles Algorithm. Stability in Two-sided Matching Problems: Deferred Acceptance Algorithm.

Required Activities and Evaluation

Assignments (30%) and Final Exam (70%)

Main References

Additional references for each topic will be provided during the course. Main sources of reference are:

Part I: Equity

Atkinson, A.B. and F. Bourguignon (eds.) (2000 and 2010). *Handbook of Income Distribution*. North Holland.

Cowell, F. (2011). *Measuring Inequality*. Oxford University Press. 3rd edition.

Lambert, P.J. (2001). *The Distribution and Redistribution of Income*. Manchester University Press, 3rd edition.

Ravallion, M. (2016). *The Economics of Poverty*, Oxford University Press.

Salvedra, W., B. Nolan and T. Smeeding (2009). *The Oxford Handbook of Economic Inequality*, Oxford University Press.

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Part II: Incentives

Salvador Barberà (2001). "An introduction to strategy-proof social choice functions," *Social Choice and Welfare* 18, 619-653.

Salvador Barberà, Hugo Sonnenschein and Lin Zhou (1991). "Voting by committees," *Econometrica* 59, 595-609.

David Gale and Lloyd Shapley (1962). "College admissions and the stability of marriage," *American Mathematical Monthly* 69, 9-15.

Jordi Massó (2015). "Alvin E. Roth and Lloyd S. Shapley, Nobel prizes in Economics 2012 for the theory of stable allocations and the practice of market design," *Contributions to Science* 11, 103-112.

Hervé Moulin (1980). "On strategy-proofness and single peakedness," *Public Choice* 35, 437-455.

Alvin Roth (2015). *Who Gets What-and Why: The Economics of Matchmaking and Market Design*, Houghton Mifflin Harcourt, Boston, New York.

Alvin Roth, Tayfun Sönmez and Utku Ünver (2004). "Kidney exchange," *Quarterly Journal of Economics* 119, 457-488.

Yves Sprumont (1991). "The division problem with single-peaked preferences: a characterization of the uniform allocation rule," *Econometrica* 59, 509-519.

Yves Sprumont (1995). "Strategy proof collective choice in economic and political environments," *Canadian Journal of Economics* 28, 68-107.