

Public Goods

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Lecture 17
Turbo Section
Elements of Economic Analysis II
Fall 2011

Introduction

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- ① Collaboration as a dual of Cournot competition

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- 7 Brief wrap-up of the course

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⇒ Identical to Cournot competition (Sonnenschein 68)

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 - “Tragedy of the commons”, “collective action problem”

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The Collective Action Problem

In a large population with voluntary contribution, “public goods” become arbitrarily under-provided.

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 - Individuals know value better than entrepreneur

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⇒ Neglects many important problems (especially bads)

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⇒ Not a solution for “real” public goods

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We can study this formally by crunching numbers

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 - May improve a bit when not i.i.d., but still high!

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- ⇒ No private (voluntary and self-financing) system works

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⇒ Both strategies identical coercive tax-raising

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Imperfections with voting (or anything else)

How is voting as a way to make decisions?

- Suppose again even shares, i.i.d. values
- We want it to pass if $\sum_i v_i > C$ or $\bar{v} > \frac{C}{N}$
- When does it pass under voting?
 - If majority (or what ever plurality X) have $v_i > \frac{C}{N}$
 - Thus determined by *median* or X quantile, not mean

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- Much worse still with more than 2 decisions

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The only ranking satisfying these properties makes one citizen a dictator over all others (social choice is her choice)!

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- But can we do better than this?

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I have been working on this problem recently

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- Combine the role of expert and voter, improve our world