Preliminary Organisation

**Term:** Autumn 2011  
**Lecture:** Public Choice  
**Time:** 15-17 Uhr, Donnerstag  
**Place:** ML F 40  
**Coursework:** discussion will take place in lecture

**Lecturers:** Dr. Ian MacKenzie; Dr. Markus Ohndorf  
**Address:** Center for Economic Research (CER), Zue F10, Zürichbergstrasse 18  
**Office Hours:** By appointment  
**E-mail:** imackenzie@ethz.ch; ohndorf@econ.gess.ethz.ch  
**Examination:** (closed book) written exam
Lecture notes and advice

Lecture slides will appear online before the respective lecture:
Recommendations:

▶ Slides are in no way a substitute for attending lectures
▶ Take notes and ask questions during the lecture
▶ Read the book! You will fail if you don’t!
▶ Study the cited literature
Preliminary Courses

- This course involves standard Calculus and Algebra manipulation and game theoretical issues
- No prerequisite

**Aims of course:**

1. To provide a primer in Public Choice
2. To provide a more effective rationale for the politics that we encounter
3. You will learn about:
   - Voting: systems; voting behaviour; paradox
   - Government: existence; size; problems
   - Lobbying: existence; incentives; determination of policy
Lecture Outline

- Lecture 1: Introduction and origins of the state (Chps 1/2)
- Lecture 2: The choice of voting rules (Chps 5/6)
- Lecture 3: Multi party systems (Chps 4/13)
- Lecture 4: Paradox of voting (Chp 14)
- Lecture 5: Bureaucracy (Chp 16)
- Lecture 6: The size of government (Chp 21)
- Lecture 7: Government size and economic performance (Chp 22)
- Lecture 8: Rent seeking (Chp 15)
- Lecture 9: Interest groups, campaign contributions, and lobbying (Chp 20)
- Lecture 10: Social welfare functions (Chp 23)
- Lecture 11: The constitution as a utilitarian contract (Chp 26)
- Lecture 12: Public Choice and the environment
- Lecture 13: What have we learned? (Chp 27)
Literature


Journals:

▶ Public Choice
▶ Journal of Public Economics
▶ Journal of Theoretical and Institutional Economics
▶ European Journal of Political Economy
What is Public Choice?

- Aristotle: ‘Man is by nature a political animal’
- Smith: Propensity to engage in economic exchange
- Two separate fields studied: politics and economics
  - **Politics**
    - Behaviour in public arena
    - Pursues public interest
  - **Economics**
    - Behaviour in marketplace
    - Pursue private interest
- Dichotomy? Can man be both? In Public Choice it is assumed that they are
- Public choice: economic study of *non-market* decision making: the application of economics to political science.
- Theory of the state, property rights, party politics, bureaucracy etc.
The reason for collective choice

- Imagine two agents, A, B and there is no government. If they trade their goods, welfare improves: invisible hand theorem.

- However, there is always an incentive to steal:

<table>
<thead>
<tr>
<th>A/B</th>
<th>Don’t steal</th>
<th>Steal</th>
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<tbody>
<tr>
<td>Don’t steal</td>
<td>(10,9)</td>
<td>(7,11)</td>
</tr>
<tr>
<td>Steal</td>
<td>(12,6)</td>
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- Without government (read: laws and rules) outcome will be the ‘Hobbesian state’ (8,8). This is the natural distribution: pure anarchy.

- But agents realise that if they both agree to not steal they will be better off: formation of laws: both formal and informal

- A movement away from the Hobbesian world: constitutional contract: James Buchanan

- Problem of collective choice: a system of laws is a *public good*: agents may free ride: movement back to anarchy: the need for collective action in centralized form.
Solutions to this Prisoners’ dilemma

▶ tit-for-tat strategy
▶ punishment strategy
▶ large communities: observation problem: need for agreement over beneficial actions and based on rewards and sanctions
▶ Democracy with formal voting mechanisms for making and enforcing collective choices is needed only by large communities (e.g. not the same in families and tribes and small communities etc)
▶ Does state interventions ‘free-up’ the individual from responsibility?
Coordination game

- Prisoner’s dilemma: always dominant to cheat
- Alternative game of coordination

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<thead>
<tr>
<th></th>
<th>A</th>
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<tbody>
<tr>
<td>A</td>
<td>(a,a)</td>
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<tr>
<td>B</td>
<td>(0,0)</td>
<td>(b,b)</td>
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- Focal point: \( b > a \) then both have preference for B.
- Inherent stability and less stringent assumptions than Prisoners’ dilemma.
- So collective choice occurs rationally without the need for a state.
- Public goods: voluntary contributions to support a public good are always less than Pareto-optimal. A states is needed.
Some form of tacit agreement needed.

Similar to prisoners’ dilemma, as population increases democratic institutions needed
Externalities

- Externality: When consumption or production activity of one individual or firm has an *unintended* impact on the utility of others. E.g. pollution
- Existence of externalities results in non-Pareto optimal outcome.
- Too much pollution create; too little vaccinations occurring.
- Externality generator does not internalize the full cost (benefit) of actions.
- Solutions to this problem: introduction of state: Pigouvian tax.
Figure: A Pigouvian solution.
Alternative solution: Coase theorem

- Coase challenged Pigouvian view: existence of externality does not need government intervention.
- Affected parties could work out the problem without government help.

Coase (1960) *Journal of law and Economics*

Pollution $\Rightarrow$ externality

- Coase argued than an *efficient* level of pollution can be achieved by relying on polluter and suffer bargaining over set of well defined pollution rights

Important assumptions:

1. Well defined property right (enforceable in court)
2. No informational deficiencies (no moral hazard adverse selection)
3. No transaction costs
The efficient Coasean bargaining solution

- Scenario 1: polluter gets rights to pollute ⇒ suffers prepared to pay polluters to reduce pollution (movement left) e.g. adaption policies
- Scenario 2: suffer has all rights not to be polluted ⇒ polluter willing to compensate suffer for pollution it may cause (movement right)
- Efficient bargaining outcome where the marginal benefit of the polluter is equal to the marginal damage of the suffer(s)
- Problems with Coase theorem?

**Theorem**

(\text{Coase Theorem}): given the stated assumptions, trade in property rights for an externality will lead to an efficient allocation independent of the initial allocation of property rights
$-D'(a)$

$C'(a, \theta_0)$

$a^*(\theta)$

Figure: Coasean bargaining.
Gold star for me: research-related teaching!

- MacKenzie and Ohndorf, work in progress. *Basic rights and the Coase theorem*
- Initially ambiguously defined property rights
- Show the need for basic rights on post-constitutional contract.

\[
\eta - D'(a) \quad C'(a, \theta_0)
\]

Figure: The delineation of basic rights \( \eta \) and \( \epsilon \).