Political Economy
Institutions and policies
Positive Approach

Plan
• Consider different institutions and predict the policies that will be generated
  – Electing the Executive: Median voter theorem
  – Legislature: Logrolling and efficiency

Median Voter Theorem
• Assume voters have single peaked preferences over policies.
• Each candidate has to announce the platform.
• Then the election takes place.
• Which platform will be chosen?
Result

- The median voter’s platform (most preferred policy will be chosen).

Assumptions of the Median Voter Theorem

- Single dimensional preferences.
  - Is it a sensible assumption?
  - What counterexamples can you suggest?
- Full information
- 100% turnover

Stable Outcomes

- The Median Voter Theorem generates a prediction of an outcome
- This prediction is independent of the identity of the candidates who run for the office.
- The fact that the platforms of the candidates converge to the center is a stable outcome.
Two dimensional preferences:  
The outcome may be unstable

- Assume that the policies are two-dimensional, but they are single peaked
- There are three voters with preferred points: (1,0); (0,0); (0,1)
- Can you predict what policy will be chosen by majority voting?

Can Logrolling Improve Welfare?

- An example
- Three legislators have to decide upon acceptance of three projects: A, B, C. The table below represents the net benefit from the projects to each one of the voters.
- Compare the results with and without vote trading under majority rule. Repeat the comparison under unanimity rule.

<table>
<thead>
<tr>
<th>Project</th>
<th>Melanie</th>
<th>Rhett</th>
<th>Scarlett</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>-50</td>
<td>-35</td>
</tr>
<tr>
<td>B</td>
<td>-40</td>
<td>150</td>
<td>-30</td>
</tr>
<tr>
<td>C</td>
<td>-120</td>
<td>-60</td>
<td>400</td>
</tr>
</tbody>
</table>

Can Logrolling Dampen Welfare?

- An example
- Three legislators have to decide upon acceptance of three projects: A, B, C. The table below represents the net benefit from the projects to each one of the voters.
- Compare the results with and without vote trading under majority rule. Repeat the comparison under unanimity rule.

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<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>-110</td>
<td>-105</td>
</tr>
<tr>
<td>B</td>
<td>-40</td>
<td>150</td>
<td>-120</td>
</tr>
<tr>
<td>C</td>
<td>-270</td>
<td>-140</td>
<td>400</td>
</tr>
</tbody>
</table>
Logrolling under Unanimity

- Under majority voting logrolling can lead to acceptance of inefficient (Benefits<Costs) projects.
- Under unanimity and in the presence of logrolling only the projects that generate more benefits than the costs will be accepted.

Budgetary Externality and “Pork Barrel Spending” under majority rule

<table>
<thead>
<tr>
<th></th>
<th>Region A</th>
<th>Region B</th>
<th>Region C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big project, B/C</td>
<td>400/500</td>
<td>250/170</td>
<td>150/110</td>
</tr>
</tbody>
</table>

Budgetary Externality and “Pork Barrel Spending” under unanimity

<table>
<thead>
<tr>
<th></th>
<th>Region A</th>
<th>Region B</th>
<th>Region C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small project, B/C</td>
<td>100/50</td>
<td>100/50</td>
<td>100/30</td>
</tr>
<tr>
<td>Big project, B/C</td>
<td>400/200</td>
<td>200/80</td>
<td>150/160</td>
</tr>
</tbody>
</table>
Budgetary externality (shared lunch problem)

- Budgetary externality occurs when “local” public projects (projects with concentrated benefits) are covered from general tax revenues
- Representatives of localities will tend to choose bigger projects (overspend) as opposed to the social optimum. Under majority rule this can lead to acceptance of projects with smaller benefits than the costs.

Why use “general tax revenues” at all?

- Some projects considered by the federal government are of “national” importance so that the benefits are “spread” evenly across the population (for example, defense)
- If the benefits are equal across localities, then equal cost sharing with majority or unanimity leads to acceptance of efficient projects only

How to eliminate (diminish) the problem

- Solution 1: change the cost sharing arrangement for the “local” projects
  - need separate legislation for each “type” of project
  - need reliable “third party” estimates of benefits and costs of a project
- Solution 2: let local governments pay for the local projects
  - need constitutional division of responsibilities between the layers of government