



MASARYK UNIVERSITY
FACULTY OF ECONOMICS
AND ADMINISTRATION

Public choice and government failures

BPV_APEC Public Economics

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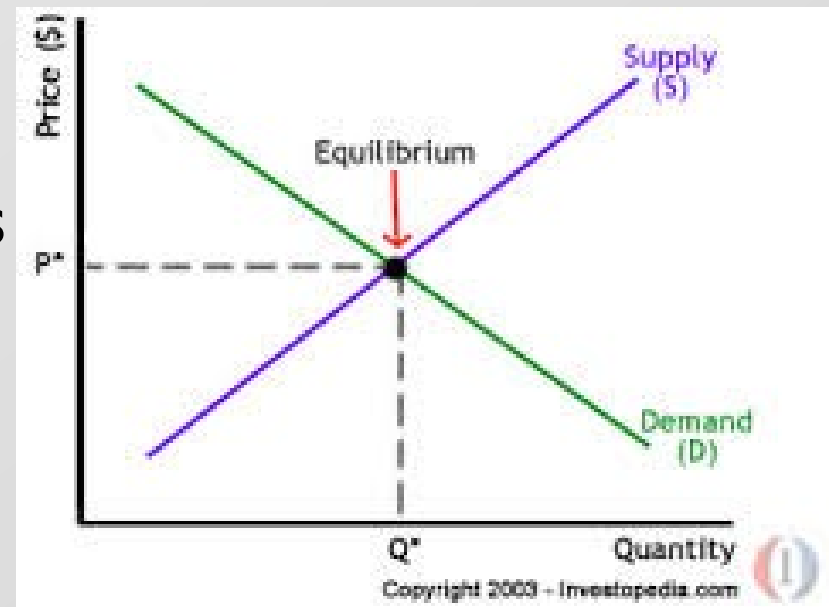
BPV_APEC Public Economics: Public Choice

What are we going to talk about?

- How does decision making in private and public sectors differ?
- How to make good decisions in public sector?
- Are there any influences?
- Or paradoxes?

Private Sector

- Equilibrium: demand curve and supply curve
- Individuals reveal preferences about the private goods by buying them
- Price reflects individual's preferences



Public Sector

- No demand x supply equilibrium
- Price is not obvious
- Decisions made by public agencies, not „customers“
- Individuals vote to elect representatives who vote for public budget
- Budget is spent by public agencies
- No comparability to private sector

What is public choice?

- “Public choice can be defined as the economic study of nonmarket decision making”,
“Application of economics to political science”
(Mueller, 2009)
- Covers:
 - theory of the state
 - voting rules
 - voters behavior
 - bureaucracy
 - legislatures
 - etc.

An easy public choice:

Action	Name	Cost	Benefit	C/B
A	Cycling roads	500	600	1,2
B	Recreational center	290	290	1
C	Ice hockey hall	200	180	0,9
D	Stadium reconstruction	280	350	1,25
E	Youth sport support	240	300	1,25

Your budget is 800. For every action, the benefit is + 100.
 What is the best combination?

Voting in Public Sector

■ UNANIMITY

Time consuming

Leads to Pareto-preferred situation

Encounters strategic behavior

■ MAJORITY

Most used

Lower costs

Less time to make decision

Some individuals will be worse off



Majority rules:

- Simple majority rule ($>50\%$)
- Runoff election (1st round $>50\%$ if not best 2 to 2nd round)
- Plurality rule (most “popular” wins)
- Approval voting (choose more options; most “popular” wins)
- Borda count (n choices, give to each option points $\{1,2,\dots,n\}$, most popular n, least popular 1; most points wins)
- Hare system (select best; in each round the least popular options leaves until there is only one)
- Coombs system (select worse; in each round the least popular options leaves until there is only one)

What can influence the voting?

- Personal constrains attitudes
- Physical, social, economic, moral, psychological, etc.

- External influences
- Politics, lobbying, corruption, international relations, legislation, economics, labor unions, etc.
- Would you make voting compulsory?

Tactical voting

- Compromising (what happens if the country has first-past-the-post election systems?)
- Burying - very useful if some party has open primaries
- Push-over – Imagine you are a French voter, who likes Sarkozy. Polls for first round say: Sarkozy 24%, Hollande 18%, Le Pen 17%, lot of other candidates, the Left has a majority.

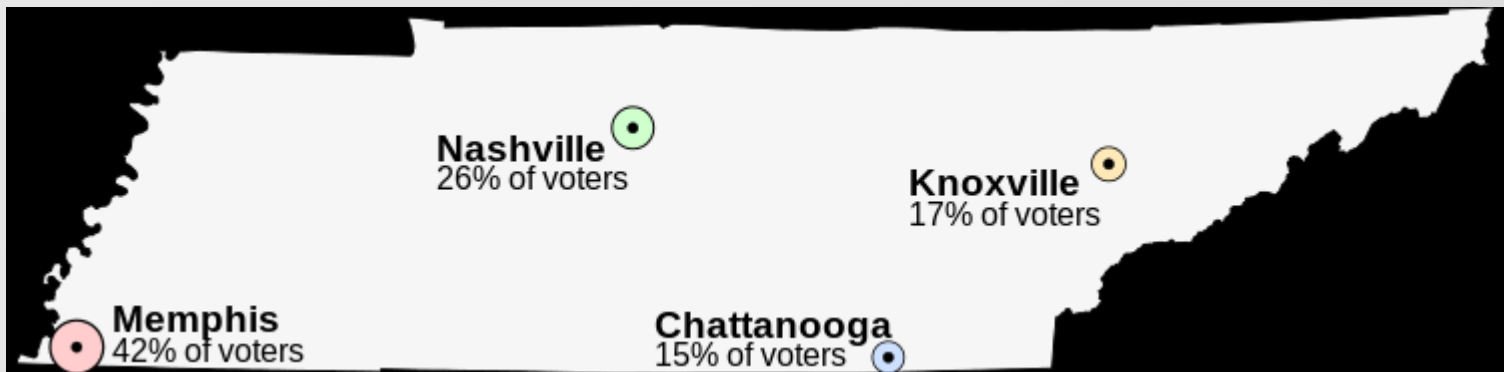


Condorcet criterion

- Used to measure efficiency of choices
- Pair-wise comparison of possible outcomes



Tennessee needs a new capital, but where?



The preferences of the voters

42% of voters (close to Memphis)	26% of voters (close to Nashville)	15% of voters (close to Chattanooga)	17% of voters (close to Knoxville)
1. Memphis 2. Nashville 3. Chattanooga 4. Knoxville	1. Nashville 2. Chattanooga 3. Knoxville 4. Memphis	1. Chattanooga 2. Knoxville 3. Nashville 4. Memphis	1. Knoxville 2. Chattanooga 3. Nashville 4. Memphis

Matrix

		A			
		Memphis	Nashville	Chattanooga	Knoxville
B	Memphis		[A] 58% [B] 42%	[A] 58% [B] 42%	[A] 58% [B] 42%
	Nashville	[A] 42% [B] 58%		[A] 32% [B] 68%	[A] 32% [B] 68%
	Chattanooga	[A] 42% [B] 58%	[A] 68% [B] 32%		[A] 17% [B] 83%
	Knoxville	[A] 42% [B] 58%	[A] 68% [B] 32%	[A] 83% [B] 17%	
Ranking:		4th	1st	2nd	3rd

Arrow's impossibility theorem

- Voting rule should fulfill:
- Universality (all choices are allowed)
- Non-dictatorship
- Pareto efficiency
- Independence of irrelevant alternatives.
- But none of the rules does!

In other words: No voting rule is fair.

The paradox of voting

- Also called Downs paradox
- Individual preferences in a group may lead to ineffective outcome therefore voting becomes irrational.
- Decision of people to cast a vote is led not only by a human rationality.



Not only humans vote



The honeybee occasionally needs
Find a new place for a nest.

The swarm sends out scout bees
To look for a new location

What method the bees use?

- First the researchers thought bees preferred unanimity.
- Then they observed that only a quorum is sufficient – 30 bees out of 75 bees at a potential nest site.

How to reward bureaucrats?





- There are huge differences between countries:
- Top pay for elite work
- Strict seniority
- Project management



Can we or government punish bureaucrats if something goes wrong?

- Most projects end behind schedule.
- Also more expensive and less useful than expected initially.
- What exactly would we punish?



Can we reward bureacrats if they do well?





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Thank you for your attention

