

POLITICAL ECONOMY

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Two-party competition

Representative democracy

- Many voters,
- many issues:
- direct democracy is impossible.
- Therefore: representative democracy:
- select individuals to represent the various positions most members of the polity are likely to hold.

Public choice questions in a representative democracy

Three questions we shall pose:

- How will representatives behave both during the campaign to be elected and while in office?

- How will voters behave when choosing representatives?
- What can we say about the outcomes under representative democracy?

Office seeking politicians (parties)

- Fundamental hypothesis: "Parties formulate policies to win elections" (Downs 1957)
- You might consider this cynical.
- Remark: If the committees are committees of representatives, all we have learnt about direct democracy also applies.

Hotelling–Black–Downs

- A frequency distribution of most preferred alternatives
- one-issue dimension;
- a unimodal,
- symmetric preference distribution,
- all individuals vote;
- two candidates (for now)
- The Nash equilibrium is for both of them to be at the median
- Would abstention and/or indifference change that?
- No for symmetric, unimodal distribution.
- Otherwise, the mode(s) pull(s) platforms from the median!

Primaries

- What if there is first competition within parties, then between parties?
- First party median, then country median.

- Two-step game!
- E.g. recent rule change in California: everyone can vote in primaries – why? (http://ballotpedia.org/wiki/index.php/California_Proposition_14,_Top_Two_Primary_Act_%28June_2010%29)

HBD – more than one dimension

More than one dimension: in general, instability can reoccur.

You can try to restrict the set of plausible factors:

Def. The uncovered set: The uncovered set is the set of all points y within the set of feasible alternatives S , such that for any other alternative z in S , either yPz or there exists some x in S such that $yPxPz$, where aPb means a beats b under majority rule.

- The uncovered set is always contained within a circle of radius $4r$, where r is the radius of the circle of minimum radius that intersects all median lines (the "yolk").

Adding valence dimensions (that everyone cares in the same direction about, like honesty), might help a bit: For any given distribution of voter ideal points, there exists a difference of the valence issue(s) between the two candidates sufficiently large to guarantee the leading candidate on this issue victory, if she selects a platform near the center of the yolk.

HBD – several candidates

- For two candidates/players, best response/reaction function:
- next to the other guy, on the median side.
- The NE is: both at the median.
- What about *three* players?
- No NE! That is, none in pure strategies

- *What if there are three players?* An equilibrium is then characterised by $1/4, 1/4, 3/4, 3/4$ and each party gets 25% of the votes.
- Why?
- A party at $1/4$ does not have the incentive to move towards the left because it will get less than $1/4$. Similarly, it will not have the incentive to move towards the center because it will not get more than the half between $3/4-1/4$ (which is $1/4$).
- What about *five* parties? An equilibrium is characterised by $1/6, 1/6, 3/6, 5/6, 5/6$.
- This is asymmetric: the two parties at the extremes get $(1/6 + (3/6 - 1/6)/2)/2 = 1/6$, but the party in the center gains more $2 \times (3/6 - 1/6)/2 = 2/6$
- Consider the parties at $1/6$: By moving to the left a party can only get less than $1/6$. By moving towards the center, they cannot get more than $1/6$.
- The party in the center cannot get more than $2/6$ by moving to any extremes.

HBD – several representatives

- General result: If the number of parties is greater than 5 there is always an equilibrium and in fact there are infinite number of pure strategy equilibria. If the number of parties is even, then there always exists an equilibrium where each of the parties get the same proportion of the votes, but if the number of parties is odd, there is no such equilibrium.
- For instance, for six parties $x^*[1/6-d/3, 1/6-d/3, 1/2-d, 1/2+d, 5/6+d/3, 5/6+d/3]$, where $0 \leq d \leq 1/8$ and d is the same for all parties.

HBD – relaxing the assumptions: policy preferences

- What if candidates have personal policy preferences?
- Relative weights?
- Can they precommit?
- If they can, those issues get taken out, and the issue space is more likely to be lesser- (one)-dimensional.

Testing HBD

- How would you test it?
- Include the *median* income and *median* tax price, along with taste parameters in regressions explaining the quantity of (local) government expenditures.
- Does the *median* explain better than the *mean*?
- Yes, but not dramatically.