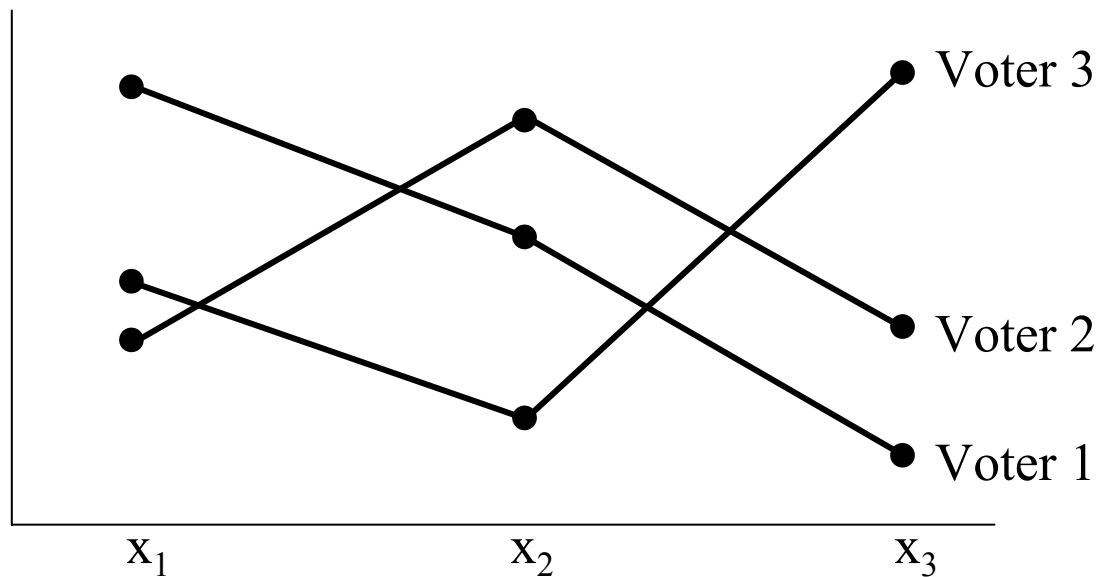


Overview of the lecture

- **Voting**
 - Retrospective voting and convergence to the median voter
 - Lobbying and divergence from the median voter
- **Turnout**
 - Costly voting
 - The swing voter's curse
- **Expressive voting**
 - The indifferent middle class
 - A moral majority?

The Median Voter Theorem

- There are n voters in a **one** dimensional issue space.
- Each voter has an ideal point $x_i^* \Leftrightarrow U_i(x_i^*) > U_i(x)$ for all $x \neq x_i^*$
- The preferences of all voters are *single peaked*.
 - For two points y and z with either $y, z \geq x_i^*$ or $y, z \leq x_i^*$
 - If $U_i(y) > U_i(z) \Leftrightarrow |y - x_i^*| < |z - x_i^*|$



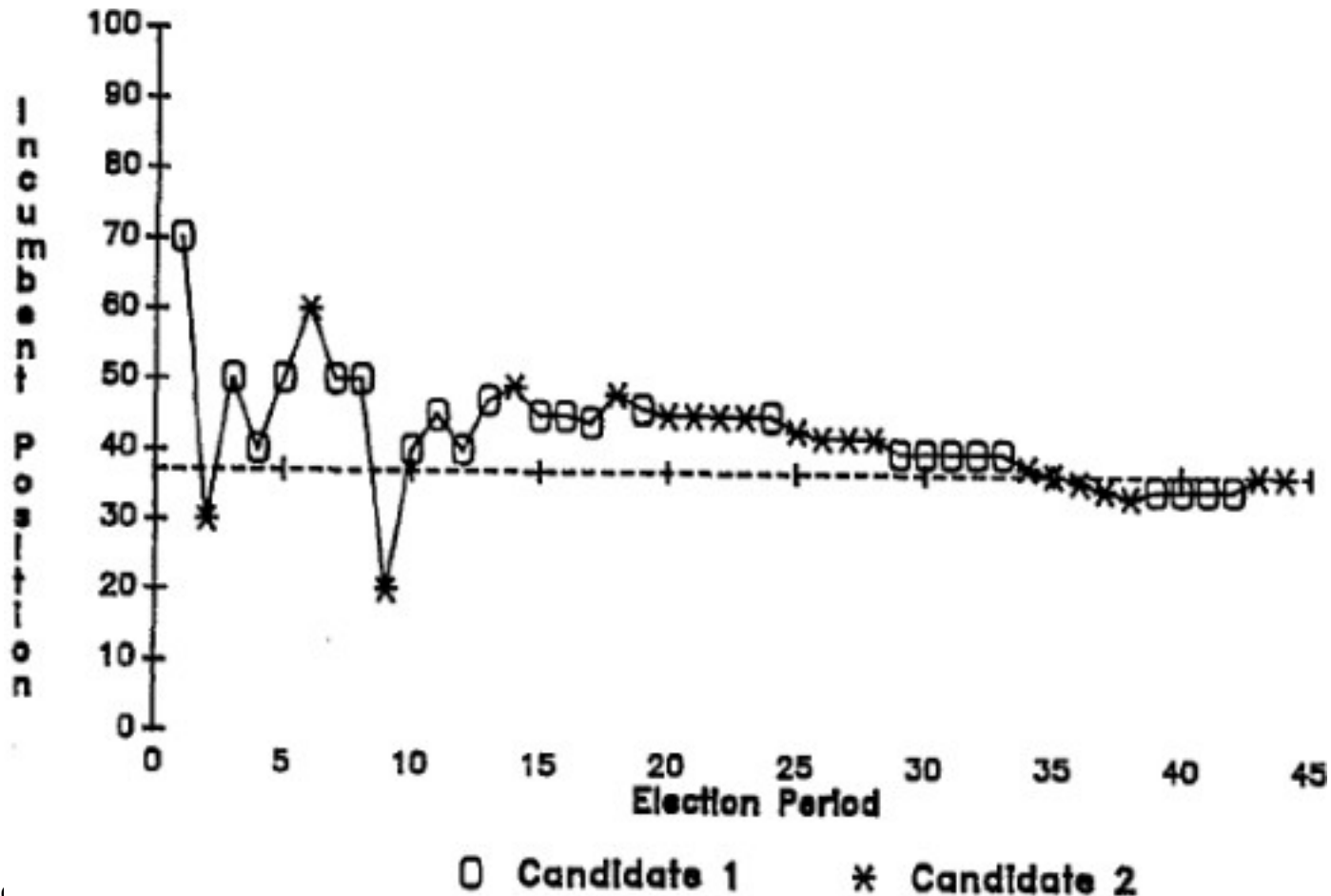
- Voter 1 and voter 2 have single-peaked preferences but not voter 3.

The Median Voter Theorem

- **Retrospective voting** Collier et al. 1987
 - The public is rarely well-informed of the policies of government.
 - and if they are they don't know what they imply
 - How then do they know who to vote for?
 - Retrospective voting: vote for parties with good past performance
- **Design**
 - 2 candidates
 - Single peaked preferences in a one-dimensional policy space
 - Voters do not know their own utility function
 - 4 treatments
 - Treatment 1: Voters and candidates know preferences are single-peaked
 - Treatment 2: Voters and candidates are uninformed about preferences
 - Treatment 3: same as treatment 2 + a shock to preferences in period 21

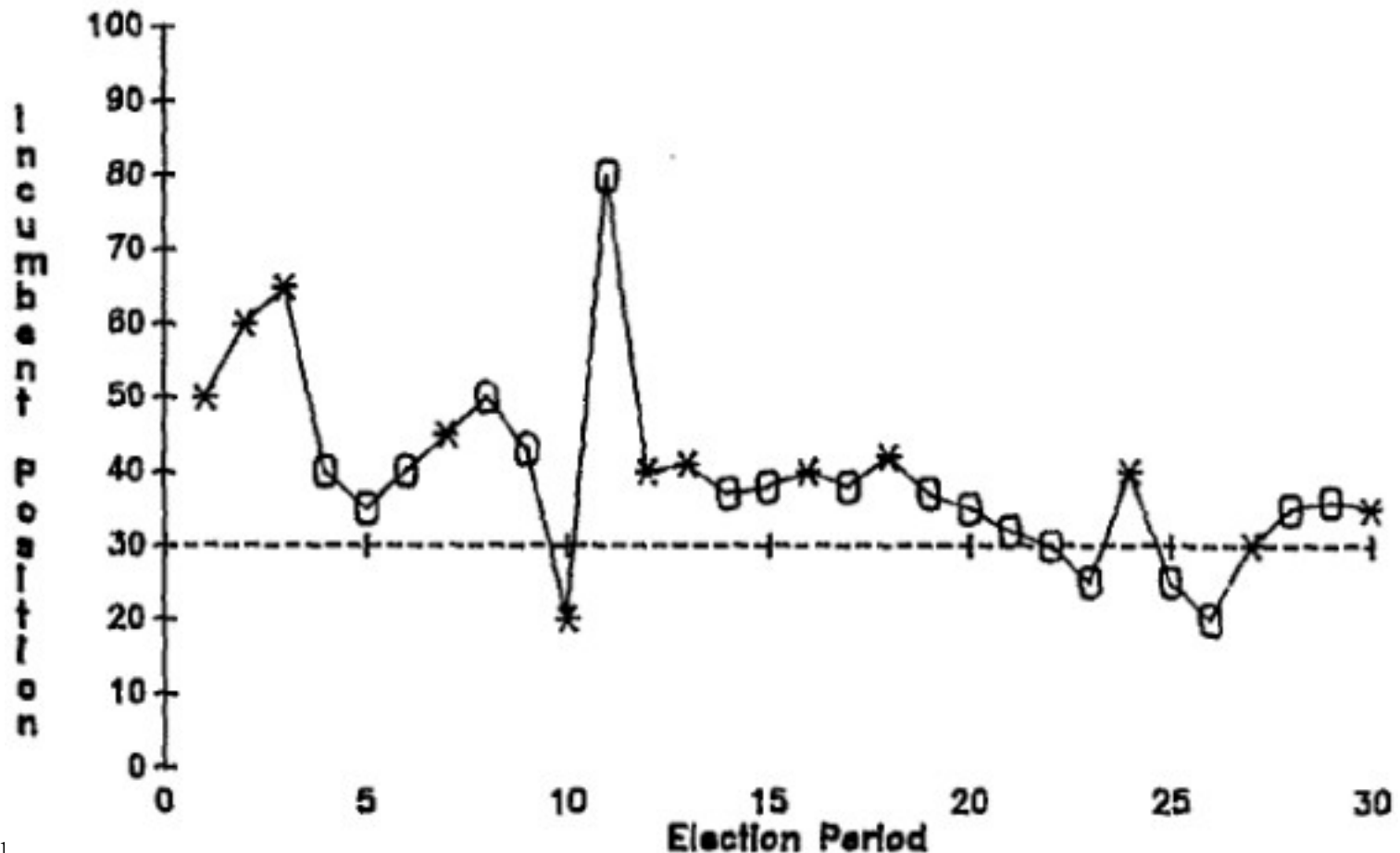
The Median Voter Theorem

- **Retrospective voting** Collier et al. 1987
 - Results: Treatment 1
 - Voters and candidates know preferences are single-peaked



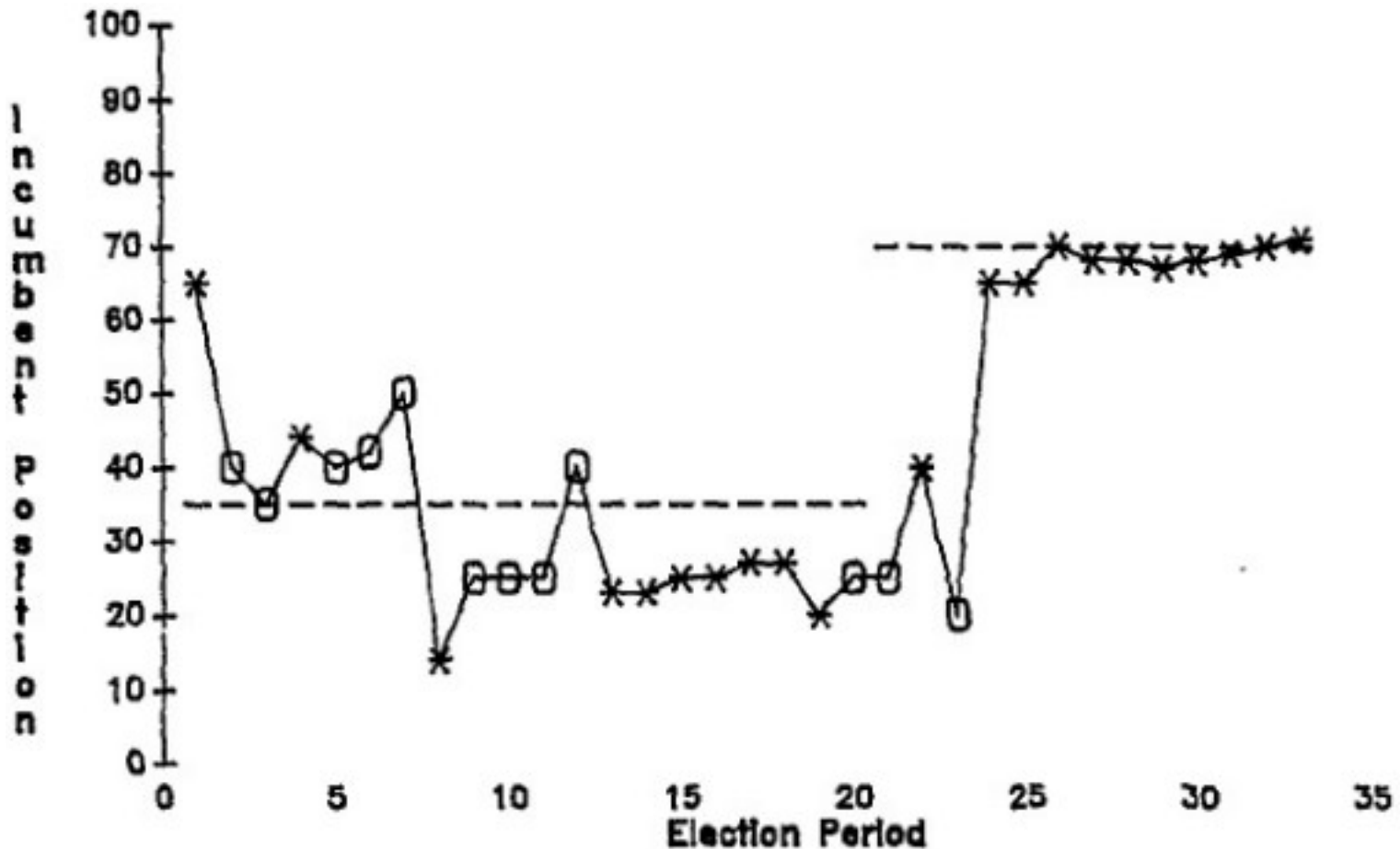
The Median Voter Theorem

- **Retrospective voting** Collier et al. 1987
 - Results: Treatment 2
 - Voters and candidates are uninformed about preferences



The Median Voter Theorem

- **Retrospective voting** Collier et al. 1987
 - Results: Treatment 3
 - Voters and candidates are uninformed about preferences + shock



Lobbying

- **Lobbying**

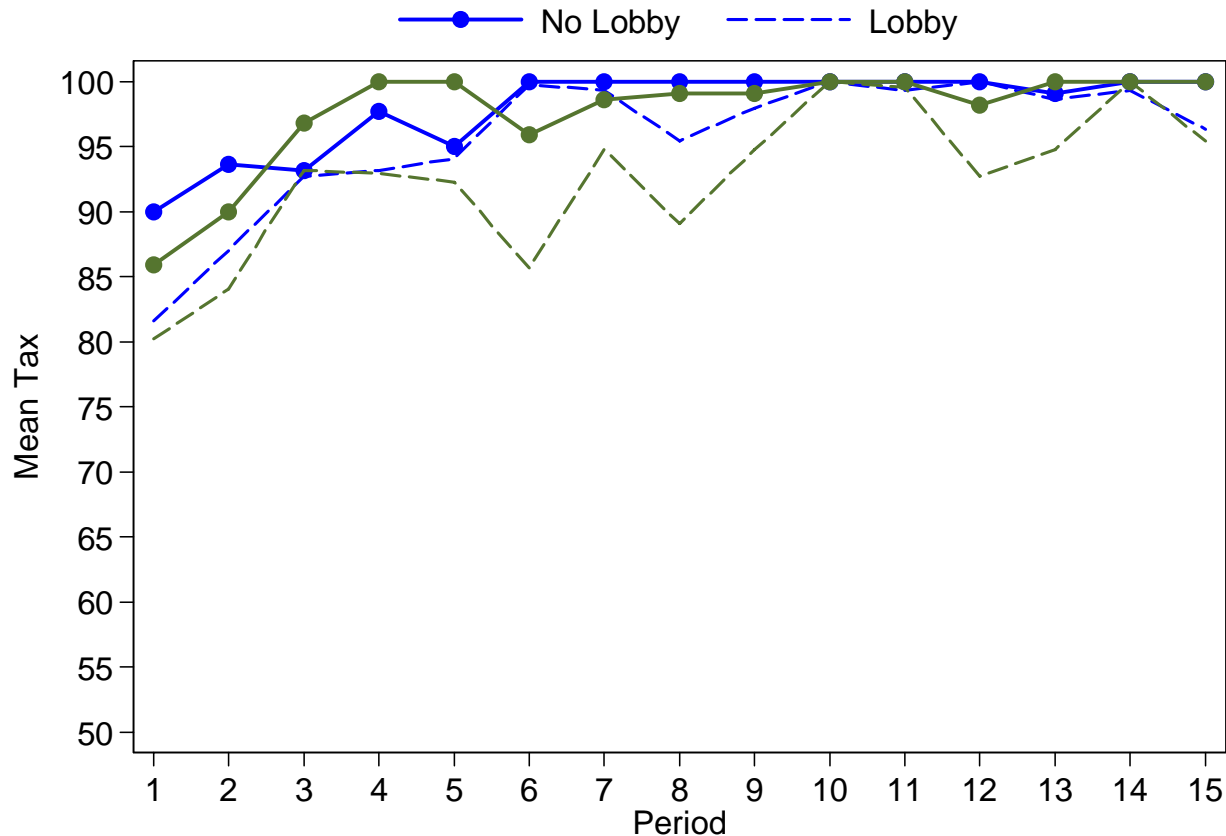
- There are many ways interest groups can directly increase the utility of policymakers with monetary transfers:
 - Bribes.
 - Gifts.
 - Campaign contributions.
 - Future jobs.
- Does convergence to the median survive in the presence of lobbying?

Lobbying

- **Voting with \$** Großer et al. 2010 (approx)
- **Design**
 - Sequence of decisions in a round
 - Voters learn their income (3 poor and 1 rich)
 - Lobbying: rich transfer any amount of their income to the candidates
 - Candidate competition: two candidates simultaneously announce tax rates $t_i \in [0, 1]$
 - Election: Voters vote for one of the tax rates (simple majority rule)
 - The winning candidate gets 25 points and the loser 15 points
 - Treatments
 - No reputation: strangers matching of candidates and voters
 - Reputation: same candidates and voters

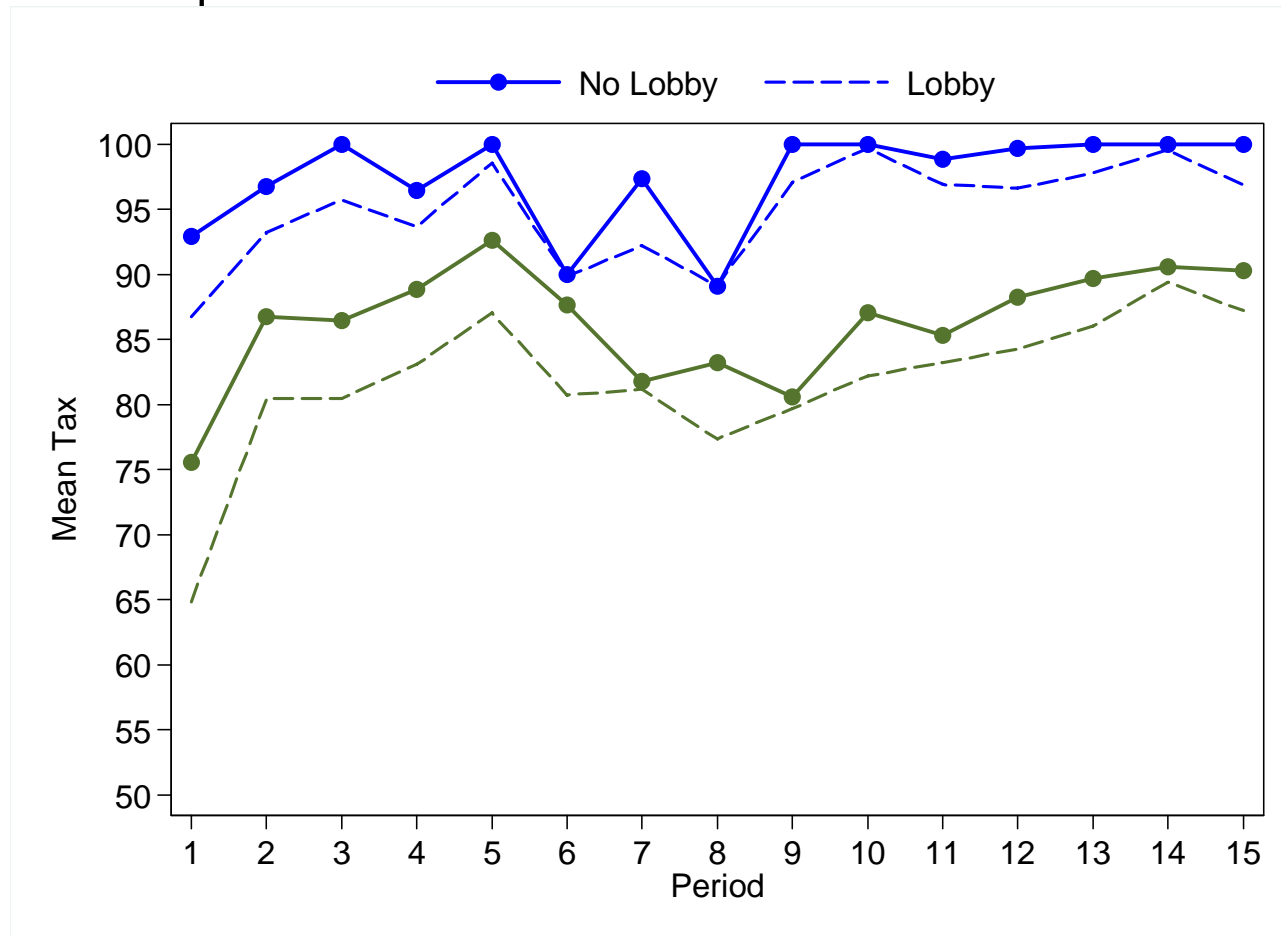
Lobbying

- **Voting with \$** Großer et al. 2010
 - Results
 - Without reputation there is no effect of lobbying



Lobbying

- **Voting with \$** Großer et al. 2010
 - Results
 - With reputation taxes are lower

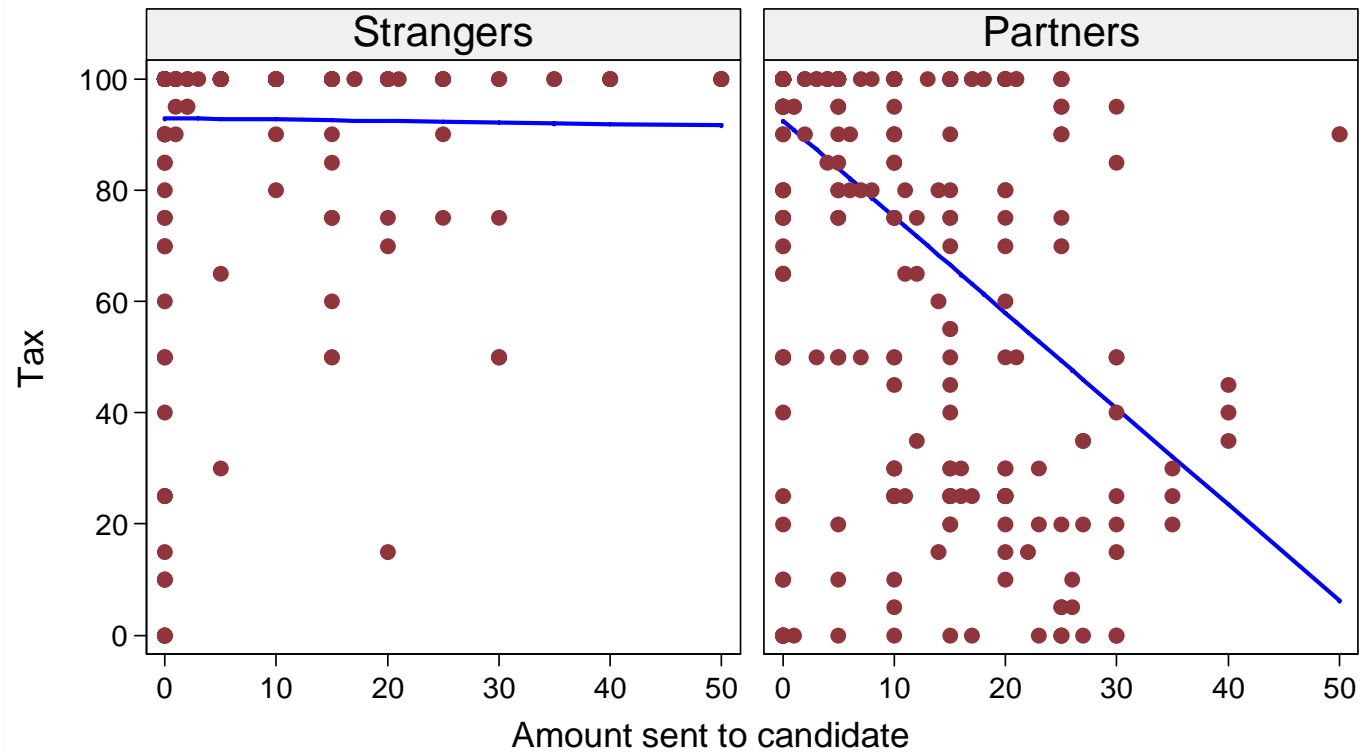


Lobbying

- **Voting with \$** Großer et al. 2010

- Results

- Candidates are not sensitive to lobbying efforts if there is no reputation



Rational Turnout

- **Why bother voting?** Levine and Palfrey 2007
 - If there are costs to voting and little chance of casting the decisive vote, why bother voting?
 - But, if nobody votes then the vote of one person becomes decisive.
 - For solution see Palfrey & Rosenthal (1983, 1985)
 - Mostly mixed strategy equilibria
 - For large electorates turnout predictions are still too small
 - But what about comparative static effects?
 - Size effect: Larger electorate leads to lower turnout
 - Competition effect: Turnout is higher in close elections
 - Underdog effect: Minorities participate more than majorities

Rational Turnout

- **Why bother voting?** Levine and Palfrey 2007
- **Design**
 - 2 candidates: A & B
 - N voters of which N_A prefer A and N_B prefer B and $N_A < N_B$
 - Voters get 105 if preferred candidate wins and 5 otherwise
 - Voting is costly, costs are drawn each period from a uniform distribution $c_i \in [0, 55]$
 - Treatments
 - Between subjects
 - 4 different group sizes: 3, 9, 27, 51
 - Within subjects
 - Landslide: $2N_A = N_B$
 - Too close to call: $N_A + 1 = N_B$

Rational Turnout

- **Why bother voting?** Levine and Palfrey 2007
 - Results
 - Size effect
 - Clear size effect in both too-close-to-call and landslide treatments
 - Smaller size effect than predicted

| N | Too close to call | | Landslide | |
|----|-------------------|------------|-----------|------------|
| | Turnout | Prediction | Turnout | Prediction |
| 3 | 57% | 61% | 57% | 61% |
| 9 | 46% | 46% | 41% | 39% |
| 27 | 37% | 30% | 31% | 24% |
| 51 | 38% | 24% | 29% | 18% |

Rational Turnout

- **Why bother voting?** Levine and Palfrey 2007
 - Results
 - Competitive effect
 - Clear competitive effect in all group sizes
 - Roughly the size of the predicted effect

| Treatment | N = 9 | | N = 27 | | N = 51 | |
|-------------------|---------|------------|---------|------------|---------|------------|
| | Turnout | Prediction | Turnout | Prediction | Turnout | Prediction |
| Too close to call | 46% | 46% | 37% | 30% | 38% | 24% |
| Landslide | 41% | 39% | 31% | 24% | 29% | 18% |
| Difference | 5% | 7% | 6% | 6% | 9% | 6% |

Rational Turnout

- **Why bother voting?** Levine and Palfrey 2007

- Results

- Underdog effect

- Clear underdog effect in all group sizes
- Roughly the size of the predicted effect

| Treatment | N = 9 | | N = 27 | | N = 51 | |
|------------|---------|------------|---------|------------|---------|------------|
| | Turnout | Prediction | Turnout | Prediction | Turnout | Prediction |
| Minority | 46% | 44% | 38% | 29% | 36% | 22% |
| Majority | 42% | 41% | 32% | 26% | 31% | 20% |
| Difference | 4% | 3% | 6% | 3% | 5% | 2% |

- Upset rates (minority wins)

- Theory predicts 37% upset rate in too-close to call elections and 16% in landslide elections
- Results show a 39% upset rate in too-close to call elections and 16% in landslide elections

Swing Voter's Curse

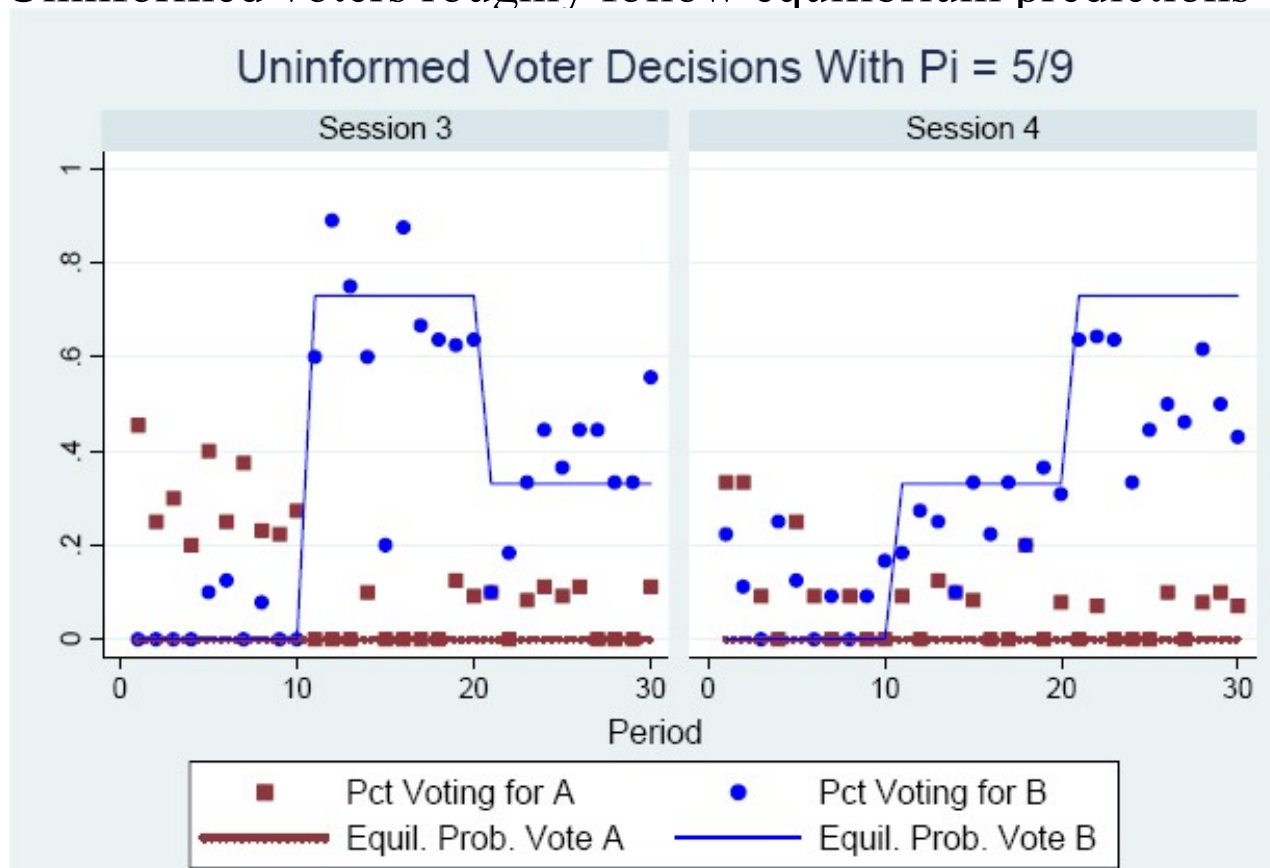
- **Strategic voting** Battaglini et al 2009
 - Long discussion in political science:
 - Do voters vote sincerely or strategically?
 - Good environment to this
 - Two states of the world and two alternatives A and B
 - Electorate consists of:
 - Partisan voters: always vote for A
 - Informed voters: know which state is the true state
 - Prefer A if A is true and B is B is true
 - Dominant strategy to vote for the true state
 - Uninformed voters: know that A is the true state with $p = 0.56$
 - Prefer A if A is true and B is B is true
 - Casting a vote can interfere with the votes of the informed voters
 - Casting a vote for B might be desirable to cancel out the effect of partisan voters

Swing Voter's Curse

- **Strategic voting** Battaglini et al 2009
- **Design**
 - 30 periods
 - 3 treatments (within subjects)
 - No partisan voters (group of 7)
 - 2 partisan voters (group of 9)
 - 4 partisan voters (group of 11)
 - There is a 25% chance of being informed

Swing Voter's Curse

- **Strategic voting** Battaglini et al 2009
 - Results
 - Informed voters always follow dominant strategy
 - Uninformed voters roughly follow equilibrium predictions



Rational Voting

- **Summary**
 - Rational models of voting do quite well in the lab
 - Predict well
 - Size, competition, and underdog effects
 - Clear evidence of strategic voting (specially after controlling for errors)
 - Still cannot predict all the turnout we see in large elections

Social Preferences and Voting

- **A cheap way of giving?** Tyran and Sausgruber 2006
- Social preferences can have a big impact on policy outcomes if they are appropriately distributed
- **Design**
 - 5 voters
 - 2 rich (250 points)
 - 2 middle class (180 points)
 - 1 poor (60 points)
 - Vote on taking 110 points and giving it to poor subject
 - Each rich pays 50
 - Each middle class pays 5
 - 10 points are lost while redistributing

Social Preferences and Voting

- **A cheap way of giving?** Tyran and Sausgruber 2006
- **Results**
 - Lots of redistribution
 - 61.4% of voters approve redistribution
 - The Fehr & Schmidt model does a good job in predicting voting outcomes

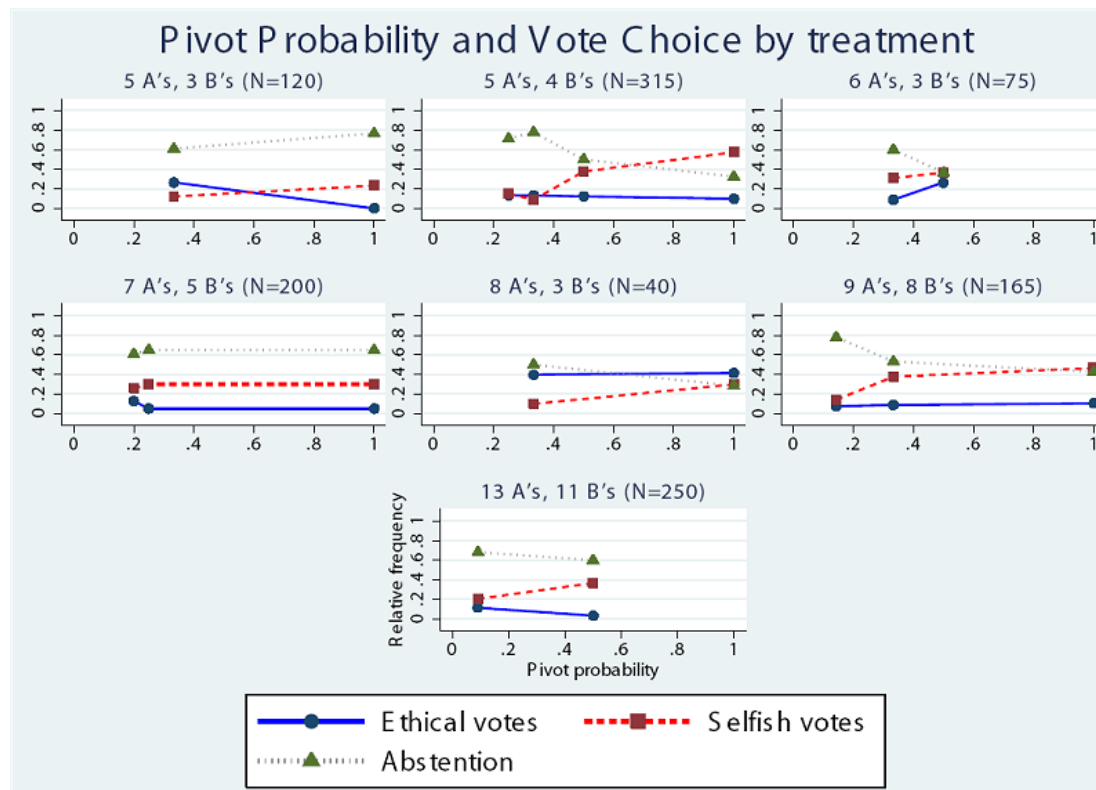
| Votes for redistribution | Selfish | Fehr-Schmidt | Experiment |
|--------------------------|---------|--------------|------------|
| Rich | 0% | 40% | 33.7% |
| Middle | 0% | 70% | 70.0% |
| Poor | 100% | 100% | 96.3% |
| Total | 20% | 64% | 61.4% |

Expressive Voting

- **Moral voting** Feddersen et al. 2007
 - A short experiment
 - There are 8 people of type A and 3 people of type B (you are a type B)
 - Two options
 - Option 1: each A gets \$18 and each B gets \$20
 - Option 2: each A gets \$0 and each B gets \$25
 - You can refrain from choosing (costs \$0) or choose one of the options (costs \$2)
 - Treatment 1: your choice is implemented or if you refrain then one of the options is implemented at random
 - Treatment 2: with probability 0.33 your choice is implemented or if you refrain then one of the options is implemented at random (with probability 0.67 someone else's choice is implemented)
- **How to vote?**
 - Selfish: abstain or vote B → more likely to vote B in treatment 1
 - Altruistic: abstain or vote A → more likely to vote A in treatment 1
 - Expressive: abstain or vote A → equally likely to vote A

Expressive Voting

- **Moral voting** Feddersen et al. 2007
 - Probability of voting B depends on the pivot probability and not on relative group size
 - Probability of voting A does not depend on the pivot probability, is increasing in the size of group A and decreasing in the size of group B



Expressive Voting

- **Testing low-cost theory of expressive voting** Tyran 2004
- It is cheap to vote for a morally desirable policy if one knows that the policy will be defeated
 - Design
 - Vote to give \$6 to a charity or not (groups of 6)
 - Indicate expectation of number of yes votes (earn an extra \$3)
 - Treatment 1: if approved, all give to charity, otherwise none give

| Expectation | Rejected | | Decisive | | Approved | |
|------------------|---------------------|-----|---------------------|-----|---------------------|----------------|
| | Yes | No | Yes | No | Yes | No |
| Selfish | \$6 | \$6 | \$0 | \$6 | \$0 | \$0 |
| Altruistic | \$6 | \$6 | $\$0 + \alpha$ | \$6 | $\$0 + \alpha$ | $\$0 + \alpha$ |
| Expressive Voter | $\$6 + \varepsilon$ | \$6 | $\$0 + \varepsilon$ | \$6 | $\$0 + \varepsilon$ | \$0 |

Expressive Voting

- **Testing low-cost theory of expressive voting** Tyran 2004
- It is cheap to vote for a morally desirable policy if one knows that the policy will be defeated
 - Design
 - Vote to give \$6 to a charity or not (groups of 6)
 - Indicate expectation of number of yes votes (earn an extra \$3)
 - Treatment 1: if approved, all give to charity, otherwise none give
 - Treatment 2: if approved, all give to charity, otherwise **yes voters** give

| Expectation | Rejected | | Decisive | | Approved | |
|------------------|---------------------|-----|---------------------|-----|---------------------|----------------|
| | Yes | No | Yes | No | Yes | No |
| Selfish | \$0 | \$6 | \$0 | \$6 | \$0 | \$0 |
| Altruistic | $\$0 + \alpha$ | \$6 | $\$0 + \alpha$ | \$6 | $\$0 + \alpha$ | $\$0 + \alpha$ |
| Expressive Voter | $\$0 + \varepsilon$ | \$6 | $\$0 + \varepsilon$ | \$6 | $\$0 + \varepsilon$ | \$0 |

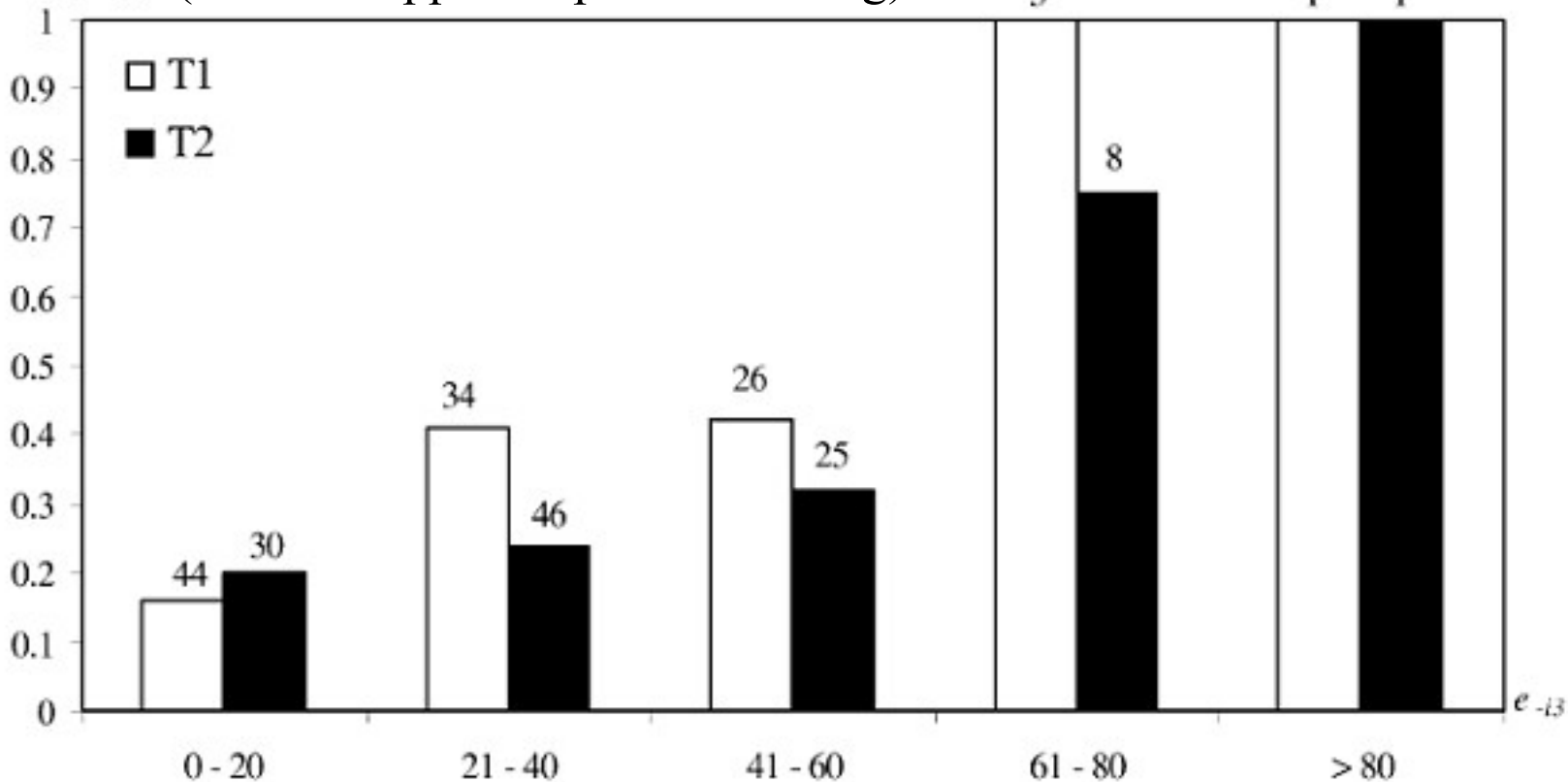
Expressive Voting

- **Testing low-cost theory of expressive voting** Tyran 2004

- Results

- More votes for giving in treatment 1 (supports expressive voting)
- More votes for giving the higher the expectation that others give

$a_3(e_{-i3})$ (doesn't support expressive voting)



Moral Voting

- **Summary**
 - Clear evidence that people vote in favor of morally attractive policies
 - Looks very similar to behavior in public good games (conditional cooperation)
 - But it might still be premature to discard expressive voting