Perverse Politics of Polarization

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When information is **scarce** and **private**:

Do elections aggregate information about polarizing policies?

Distributive politics $\Rightarrow$ Suspicion

Voters choose between status quo Q and policy reform R.

Policy reform has uncertain aggregate and distributional effects.

$\Rightarrow$ some are winners and others are losers relative to status quo.

Examples: trade agreements, immigration, healthcare, pension reforms, pork-barrel projects, budget allocation.

Theorem. *There is a strict equilibrium of the game with private info that selects a policy with prob* ≈ 1 *that would be rejected with prob* ≈ 1 *if all information were public.*

Result illustrates failure of voting mechanism to aggregate information.

We characterize a necessary and sufficient condition for this result, and use that condition to rank policies.

example: trade agreement

Model features uncertainty both about # of winners and their identities.

Example studies uncertainty only about the identity of winners.

Referendum between autarky (Q) and free trade (R).

5 voters decide via simple majority rule.

Payoff from autarky: 0 for each voter.

Payoff from free trade is uncertain:

- 3 winners have payoff of $+1$.
- 2 losers have payoff of -1.

Ex ante, voters are identical.

two benchmarks

1. Suppose all voters are known to be uninformed

Each voter prefers free trade:

$\Rightarrow$ free trade wins in every weakly undominated equilibrium.

2. All uncertainty is resolved before election

Winners vote for free trade, losers for autarky.

$\Rightarrow$ free trade wins in every weakly undominated equilibrium.

what if some voters are privately informed?

Each voter privately learns her type with i.i.d. probability $\lambda > 0$.

Information is scarce: λ small.

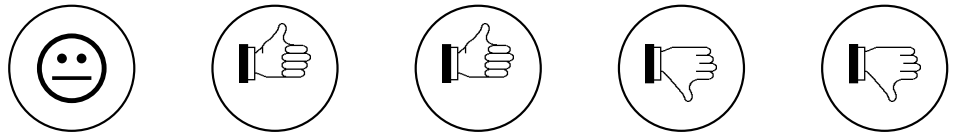
Claim. There is a symmetric strict equilibrium in which every uninformed voter votes for autarky.

Claim. If λ is small, there is a symmetric strict equilibrium in which every uninformed voter votes for autarky.

Step 1: Informed Voters:
Informed winners vote for free trade & informed loser votes for autarky.

Step 2: Incentives of Uninformed Voters:
Suppose all uninformed vote for autarky. Vote matters iff pivotal.

Consider an uninformed player, Ann.



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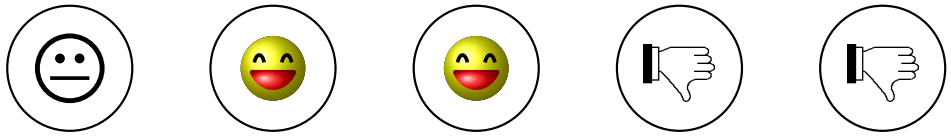

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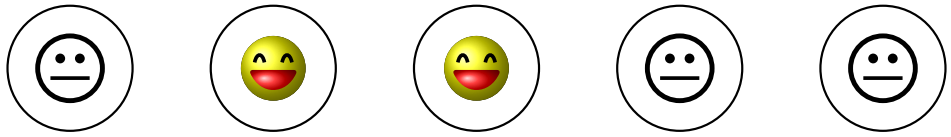

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Probability of i being a winner conditional on Piv_i and uninformed

$$= \frac{3(1-\lambda)^2}{3-2\lambda}\left(\frac{1}{3}\right) + \qquad\qquad +$$

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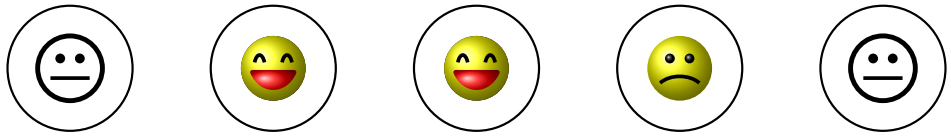

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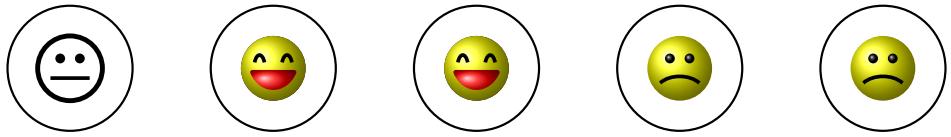

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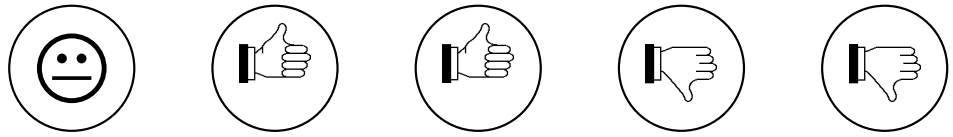

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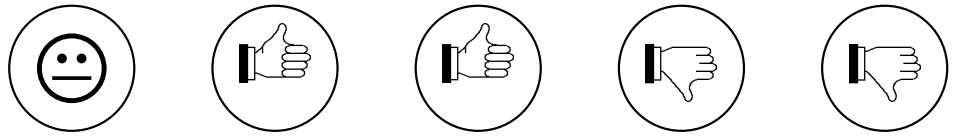

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$$\to \frac{1}{3} \quad \text{as} \quad \lambda \to 0$$

Free trade is superior *ex ante* and a Condorcet winner *ex post*.

But autarky wins with probability $\to 1$ as $\lambda \to 0$.

If all information were public, as $\lambda \to 0$, with probability converging to 1, all would vote for free trade in any weakly undominated equilibrium.

broader intuition

Voters are ex ante identical but ex interim mis-aligned.

Payoffs are neg-correlated: good news for others is bad news for Ann.

Negative correlation fosters suspicion, which induces bad policy choices.

Goal: characterize form of negative correlation necessary and sufficient for such behavior.

general model

Random # of voters (minimum population size $n > 0$).

Voting rule: R implemented iff it receives $> \tau$ proportion of votes.

Random # of winners and losers and payoffs.

Private signal s_i drawn from $\mathcal{I} \equiv \underbrace{\{s^0\}}_{😐} \cup \underbrace{\{s^1 \ldots, s^K\}}_{😄 \bigcup 😕}$.

Key assumptions:

- Voters are ex-ante identical.
- Signal 😐 received with probability $1 - \lambda > 0$.
- Signals 😄 $\bigcup$ 😕 are sufficient.

τ-negative correlation

Policy R is ex ante optimal (unconditional expected payoff > 0).

Definition. Payoffs are *τ-negatively correlated* if expected payoff is < 0 conditional on

- receiving the uninformative signal 😐
- minimum population size $\mathfrak{n}$
- exactly $\tau\mathfrak{n}$ other voters informed
- all informed voters receive good news.

Two opposing effects:

- all informed voters received good news $\implies$ many winners (😄).
- all informed voters received good news $\implies$ few winners left (☹).

τ-negative correlation if second effect dominates.

implications of τ-negative correlation

Equilibrium outcomes when information is scarce (λ sufficiently small).

Theorem 0. Public information:

R *wins with probability at least* $(1-\epsilon)$ *in the unique equilibrium.*

Theorem 1. Private information: when payoffs are τ-NC,

Q *wins with probability at least* $(1-\epsilon)$ *in a strict equilibrium.*

Theorem 2. Private information: when payoffs are not τ-NC,

R *wins with probability at least* $(1-\epsilon)$ *in every equilibrium.*

sources of τ-negative correlation

We identify three factors that lead to negative correlation.

1. Polarization ratios:

   polarizing payoffs $\implies$ τ-*negative correlation.*

2. Crowding out:

   intermediate # of winners $\implies$ τ-*negative correlation.*

3. Nature of information:

   info about distributional consequences $\implies$ τ-*negative correlation.*

related intuitions

No-trade theorem.

Resistance to reforms:
Fernandez & Rodrik ('91), Jain and Mukand ('03), Strulovici ('10).

Failures of information aggregation:
Kim & Fey ('07), GP ('09), Bhattacharya ('13), and Acharya ('16).

what we have done

Distributive politics may lead to bad policymaking when information is scarce and private.

Simple economic idea:

a) Negative correlation $\Rightarrow$ Suspicion.

b) Suspicion $\Rightarrow$ voters choose inferior policy.

Use characterization of negative correlation to rank policy reforms.

what we plan to do next

Paper is particular manifestation of class conflict on democracy.

Other settings: lobbying, policy-design, advising, and agenda-setting.

Empirics:

- Laboratory study on the extent to which this strategic force exists.
- Document (using MTurk / survey) the degree of suspicion.

Thank you!