Media and Gridlock

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I model most salient aspect of legislative process: whether minority party obstructs or not

Punchline: obstructionism more effective politically with less informative media

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- Focuses on party polarization (Layman et al, APSR, 2006) - i.e. ideology dispersion
- Can interpret my paper as highlighting necessary condition for media environment
- Or, as suggesting alternative explanation (Changing media, not ideologies, causing political behavioral change)
- Also maybe even alternative explanation for 'stylized fact' of increased party polarization?
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The model

Two parties, a majority and minority

Majority proposes policy; either efficient, $E$, or partisan and deadweight loss, $D$ ($X \in \{D, E\}$)

Minority then either accepts ($A$) or blocks ($B$) ($Y \in \{A, B\}$)

Based on US system where minority party can block policy by filibuster

If $D$ accepted, partisan benefits to majority, costs to minority and society

If $E$ accepted, benefits to society, no direct effects on parties
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Before minority acts, news reports $r \in \{r_D, r_E\}$

'Public opinion' based on reports boiled down to policy = 'bad'/'good'; publicly observable

Media environment parameterized by $
\pi = \Pr(r = r_E | E) = \Pr(r = r_D | D) \in [0.5, 1]

Media behavior/incentives not modeled explicitly (focus of other lit)

Minority may also have private information on $X$
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- 4. Views of public
Trends in public views of news accuracy
Trends in public views of news accuracy
Each party one of two types, high or low ($\theta_i \in \{\bar{\theta}, \theta\}$).

Conventional interpretation: centrist/extremist or competent/incompetent.

More realistic (?) given focus on motives (accusations of “playing politics”): idealist/cynic.

High-type is non-strategic and tries to be good public servant; low-type strategic and weighs partisan benefits versus future election prospects.

Which are function of centrist voters’ beliefs that parties are the high type (priors are $\lambda_{maj}$ and $\lambda_{min}$, with $0.5 > \lambda_{maj} > \lambda_{min}$).

Need some noise: $\epsilon$ is probability low type acts like high type.
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Illustration of timing
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Nature selects parties' types → Majority proposes new policy

- News report is $r_D$
  - Minority accepts
  - Minority blocks
- News report is $r_E$
  - Minority accepts
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Illustration of timing

- Solve with PBE:
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  $\sigma^*(r, l) = Pr(A|r, l)$ is optimal given voters beliefs and $X^*$
Results: I first show there exists a ‘total gridlock’ PBE for low $\pi$. 

Proposition: There exists a PBE in which the (strategic) majority always plays D, and minority always plays B, iff $\pi$ sufficiently small. 

$\text{D}$ more likely to ‘slip by’ for small $\pi$. And when news uninformative voters mainly update based on minority’s action—and B makes majority look bad—PBE more likely to exist when $\lambda_{\text{min}}$ small—implies only $\lambda_{\text{maj}}$ substantially changes due to actions (minority has ‘nothing to lose’). As $\pi$ increases, B hurts minority more, majority less when $r = r_E$. Proof
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  - As $\pi$ increases, $B$ hurts minority more, majority less when $r = r_E$

proof
Otherwise, if $\epsilon$ is large enough, there is still near-total gridlock
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- **Proposition**
  
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- $\epsilon$ dilutes the positive effect of A on reputations, more so for the minority
- Prevents strategic A, along with assumption $\lambda_{maj} < 0.5$
Parameter regions for total, partial gridlock equilibria; $\pi = 0.55$ (x-axis = $\lambda_{min}$; y-axis = $\lambda_{maj}$)
If $\pi$ is large, the parties cooperate
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- **Proposition**

  Iff $\pi$ is sufficiently large, there exists a PBE in which the majority always plays $E$ and the minority is more likely to play $A$, conditional on $I$ and $r$, than in any gridlock PBE.
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- **Summary:** large $\pi$, cooperative PBE exists, no gridlock PBE; small $\pi$, gridlock PBE exists, no cooperative PBE
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- Media good watchdog when accurate—forces both parties to “do the right thing”
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- **Summary:** large $\pi$, cooperative PBE exists, no gridlock PBE; small $\pi$, gridlock PBE exists, no cooperative PBE
- Media good watchdog when accurate—forces both parties to “do the right thing”
- Minority party good ‘backup watchdog’ when $\pi$ large—worse when $\pi$ is small!
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Proposition

For any $\pi_g \leq \pi_c$, $B$ is more likely to be played in a gridlock equilibrium with $\pi = \pi_g$ than a cooperative equilibrium with $\pi = \pi_c$. 
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For any $\pi_g \leq \pi_c$, B is more likely to be played in a gridlock equilibrium with $\pi = \pi_g$ than a cooperative equilibrium with $\pi = \pi_c$.

▶ (Actually non-trivial - but intuition uninteresting)
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- (Welfare results similar - actually less clean)
Reputation effects

Proposition

For any gridlock PBE with sufficiently small $\pi_g$ and cooperative PBE with sufficiently large $\pi_c$, the majority is more likely to both lose absolute reputation, and lose reputation relative to the minority, in gridlock PBE than cooperative PBE.
Reputation effects

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- Unsurprising given news, and minority action, more likely to disfavor majority in gridlock PBE
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▶ Corollary
In gridlock PBE outcomes in which the majority loses relative reputation, the minority loses absolute reputation.
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- Simple proof: $Pr(r, B|\theta_{min}) = 1 > Pr(r, B|\bar{\theta}_{min})$
Proposition

Let \( \lambda^{\text{min}} = \delta \lambda^{\text{maj}} \). Let \( \delta^\ast(\lambda^{\text{maj}}) \) equal the \( \delta \) such that \( \sim \lambda^{\text{min}}(rD, B) > \sim \lambda^{\text{maj}}(rD, B) \). Then, for gridlock PBE, \( \delta^\ast(\lambda^{\text{maj}}) \) is weakly increasing in \( \lambda^{\text{maj}} \) (strictly if \( \pi > 0.5 \)).

Reversals in reputation advantage (i.e., \( \sim \lambda^{\text{min}} > \sim \lambda^{\text{maj}} \)) more likely, for given percentage advantage of majority, when the majority has lower initial reputation.
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Let $\lambda_{\text{min}} = \delta \lambda_{\text{maj}}$. Let $\delta^*(\lambda_{\text{maj}})$ equal the min $\delta$ such that $\sim \lambda_{\text{min}}(r_D, B) > \sim \lambda_{\text{maj}}(r_D, B)$. Then, for gridlock PBE, $\delta^*(\lambda_{\text{maj}})$ is weakly increasing in $\lambda_{\text{maj}}$ (strictly if $\pi > 0.5$).
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- Reversals in reputation advantage (i.e., $\tilde{\lambda}_{\text{min}} > \tilde{\lambda}_{\text{maj}}$) more likely, for given percentage advantage of majority, when the majority has lower initial reputation.
Re-election probabilities

\[ \pi = 0.55 \text{ in gridlock PBE}, \quad = 0.95 \text{ in cooperative PBE}; \]

\[ \epsilon = 0.25, \quad \phi = 0.75, \quad \psi = 0.95, \quad \alpha = 2, \quad f(\sim \lambda_{maj} - \sim \lambda_{min}) = 0.5(1 + (\sim \lambda_{maj} - \sim \lambda_{min})^{0.3}) \text{ if } \sim \lambda_{maj} \geq \sim \lambda_{min}, \quad \text{and} \quad = 0.5(1 - (\sim \lambda_{min} - \sim \lambda_{maj})^{0.3}) \text{ otherwise.} \]
Re-election probabilities; $\pi = 0.55$ in gridlock PBE, $= 0.95$ in cooperative PBE; $\epsilon = 0.25, \phi = 0.75, \psi = 0.95, \alpha = 2, f(\tilde{\lambda}_{maj} - \tilde{\lambda}_{min}) = 0.5(1 + (\tilde{\lambda}_{maj} - \tilde{\lambda}_{min})^{0.3})$ if $\tilde{\lambda}_{maj} \geq \tilde{\lambda}_{min}$, and $= 0.5(1 - (\tilde{\lambda}_{min} - \tilde{\lambda}_{maj})^{0.3})$ otherwise.
What about voter polarization?

Natural to interpret model as implying partisan voters' opinions of opposing party decline as gridlock increases.

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1. Greater probability of the majority losing reputation (Prop 3.7)
2. Greater probability of political turnover (Prop 3.7, Figure 4)
3. Decrease in minority's reputation even just before turnover (Coroll 3.8)
4. Exacerbation of gridlock trends as minority's reputation worsens, especially relative to majority (Prop 3.1, Fig 2)
5. Exacerbation of turnover trends as majority reputation worsens (Prop 3.9)
6. Greater polarization of more partisan voters
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3. Evidence that minority's reputation declined even prior to turnover
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Concluding remarks

Model highlights role of media underlying obstructionism

Parties may act in more polarized way directly due to media changes (and not just bc of effects on voter beliefs)

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