AN INFORMATIONAL THEORY OF LOBBYING COALITIONS

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Lobbying Coalitions

Coalitional lobbying: coordinated efforts by interests to lobby government with the aim of advancing a shared advocacy agenda.

Short-term, issue-specific alliances made by (already) organized interests.

Why do we care?

- "Ubiquitous" strategy (Baumgartner et al. 2009, 180).
- Perceived to be a critical tool for influencing public policy by most lobbyists (Scholzman and Tierney 1986; Hula 1999; Nownes 2006).
- Effective when members are ideologically and organizationally diverse and the issue is salient (Nelson and Yackee 2012, JOP; Mahoney and Baumgartner 2015, JOP; Junk 2019, AJPS; Dwidar 2022, APSR; Choi 2023, WP).

Two Examples

U.S. Climate Action Partnership. Coalition of business (e.g., BP, Alcoa, Caterpillar) and environmental groups (e.g., Environmental Defense Fund).

- It came up with the 2009 USCAP Blueprint for Legislative Action, which outlined an economy-wide cap-and-trade policy as well as standards regulating coal combustion, transportation, and energy efficiency in buildings. It was a compromise, with permissive carbon offsets, free allowances and weak emissions targets.
- The Blueprint served as a model for the Waxman-Markey bill of 2009. It passed in the House, but failed in the Senate.

Two Examples

Coalition for Safe Affordable Food. Industry group set up by the Biotechnology Industry Organization, the Grocery Manufacturers Association, and CropLife America (the trade association for agrochemical producers).

- The coalition flooded Congress with warnings about the cost and confusion of a state-by-state labeling "patchwork." They supported a House bill (the Safe and Accurate Food Labeling Act of 2015) to block mandatory GMO labels and institute voluntary disclosure. This failed.
- Then they backed Public Law 114-216 (enacted in 2016) which mandated a (very lax) national bioengineered food disclosure standard. Opponents called it the "DARK Act," for "Deny Americans the Right to Know."

WHY COALITIONS?

Why does the coalitional strategy work, and when is it used?

- Lets groups pool resources (access, information, reputation, activism, numbers).
- Signals broad support for a policy; messages are more credible (Libgober and Li, 2024).
- Costly signal when used by diverse advocates (Phinney 2017; Napolio 2023).

Common untested assumption: coalitions increase information transmission (relative to competition) because they aggregate information from different sources and are more credible than individual lobbyists.

This paper. Coalitions can be effective precisely because they **reduce** the amount of information that the groups have to provide. Under some conditions this is more valuable for groups when they are diverse.

My Approach

I will consider two groups who are on the same "side" of a policy debate, but disagree on some dimension of the policy.

What does a coalition do?

- 1. It forces groups to advocate for the same policy proposal.
- 2. It lets groups coordinate the information they gather before sending it.

Question: how do these two considerations interact?

Key: there is a trade-off between **influence** and **compromise**.

Key parameters: how strong the status quo (or the other "side" of the policy debate) is, and much the groups disagree.

Preview of Results

If the status quo is strong, the policymaker is hard to persuade.

- The groups have to either form a coalition or give up.
- They form a coalition if they are not too diverse.
- The coalition improves welfare of the DM (but only with exogenous information).

If the status quo is weak, lobbying separately is feasible. In this case,

- They are forced to reveal more information.
- But they may increase the chances that their side wins.
- Since each group lobbies for their preferred policy, they face more risk.

What happens? The groups form a coalition if the are sufficiently diverse.

DIFFERENT "KINDS" OF INFORMATION

What if the groups are specialists in different aspects of policy?

The reasons for forming a coalition and the welfare implications may differ if the information the groups can produce are **complements** or **substitutes**.

Two meanings:

- the groups have information about inputs to a production function that are complements or substitutes, or
- the groups have signals that are more or less correlated, i.e., more or less substitutable.

Reasonable hypothesis: the coalition produces more information when the kinds of information each group can produce are complements.

DIFFERENT "KINDS" OF INFORMATION

Reasonable hypothesis: the coalition produces more information when the kinds of information each group can produce are complements.

Result: it depends on whether we take the first or second distinction.

- If information is about two inputs that are perfect complements, the coalition doesn't make the groups more influential compared to lobbying alone.
- If information by each group is more complementary (less correlated), it does make the coalition more influential relative to lobbying alone.

With endogenous information this doesn't matter for the policymaker. The only force that strictly increases information (in the Blackwell sense) is competition.

LITERATURE

Lobbying. Large political science literature: Hojnacki (1997, AJPS), Hula (1999), Hansen et al (2005, AJPS), Holyoke (2009, AJPS), Nelson & Yackee (2012, JOP), Barber et al (2014, Business and Politics), Phinney (2017, CUP), Junk (2019, AJPS), Lorenz (2020, JOP), Dwidar (2022, APSR), Choi (2024, WP), etc.

Other theories. Phinney (2017), Martimort & Semenov (2008, JPubE), Li & Libgober (2024, WP).

Competitive policy development. Hirsch & Sotts (2015, AER), Callander & Harstad (2015, QJE), Bonatti & Rantakari (2016, AER).

Competition in persuasion. Gentzkow & Kamenica (2017, ReStud), Boleslavsky & Cotton (2018, ET).

THE MODEL

THE MODEL

Players: two groups 1, 2, and a policymaker P.

Policymaking with policy-specific (non-transferrable) valence:

- Policies have **positional location** $x \in \mathbb{R}$ and
- valence $y_x \in \mathbb{R}$, unknown.

There is a **status quo** with valence q for the policymaker and value 0 to the groups.

The groups propose policies and messages (x, m).

P implements policy x (a=1) or keeps the status quo (a=0).

Payoffs:

- $-u_i = a(1 (x \hat{x}_i)^2)$, with $\hat{x}_1 = -\frac{h}{2}$, $\hat{x}_2 = \frac{h}{2}$. h > 0 measures **diversity**.
- $-u_P = a(y_x q).$

COMPETITION VS COALITION

The groups can **compete** or **form a coalition**.

Competition.

- Each group i simultaneously chooses a policy x_i ,
- gathers information s_i about the valence of the policy y_{x_i} ,
- and can send a message (x_i, m_i) .
- If both send proposals and P is indifferent, one is implemented at random.

Coalition.

- One group makes a proposal x to the other group.
- The groups sequentially decide to gather information s_i .
- They send a joint message (x, m).

EXOGENOUS INFORMATION

Valence is binary and iid across policies: $y_x \in \{0,1\}$ with $\Pr(y_x = 1) = \mu < q$ for each x.

Each group i can observe a realization $s \in \{0,1\}$ of a **signal** $\sigma(y_x)$ at **cost** c > 0.

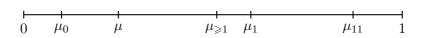
The signal is such that s shifts the prior from μ to μ_s , where

$$0 < \mu_0 < \mu < \mu_1 < 1.$$

If they lobby alone, they can send $m_i \subset \{s_i\}$.

If they lobby together and observe s_1, s_2 they can send $m \subset \{s_1, s_2\}$.

$$\mu_{11} = \Pr(y = 1 \mid s_1 = s_2 = 1)$$
 and $\mu_{\geqslant 1} = \Pr(y = 1 \mid s_1 = 1 \text{ or } s_2 = 1).$



RESULTS

Analysis

Policymaker implements a policy x if $E(y_x|\cdot) \ge q$.

Three cases:

- The groups need two favorable signals to induce adoption:

$$\mu_{11} := \mathrm{E}(y_x \mid s_1 = s_2 = 1) \geqslant q > \mu_1 := \mathrm{E}(y_x \mid s_1 = 1).$$

– It's enough to show that at least one signal is favorable:

$$\mu_{\geqslant 1} := \mathrm{E}(y_x \mid s_1 + s_2 \geqslant 1) \geqslant q > \mu.$$

- One favorable signal is enough, but at least one signal is not enough:

$$\mu_1 := \mathrm{E}(y_x \mid s_1 = 1) \geqslant q > \mu_{\geqslant 1}.$$

STRATEGIES

Competition. The groups lobby for their ideal policy $x_i = \hat{x}_i$.

Pooling resources. The groups form a coalition and lobby if they both find favorable signals.

- Welfare. Socially better than competition: groups save costs in expectation and provide (if h is intermediate) more information than if they compete.

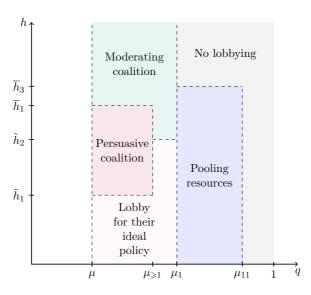
Moderating coalition. The groups form a coalition and only one gathers information.

- Welfare. Worse than competition for the policymaker, since there is less diversification.

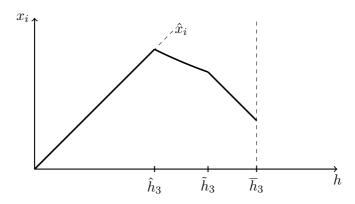
Persuasive coalition. The groups form a coalition, and they only show one favorable signal.

- Welfare. Even worse for the policymaker: more likely to implement a proposal by the groups, but these proposals are on average of lower quality.

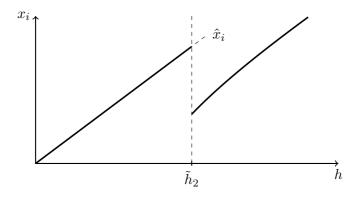
EQUILIBRIA



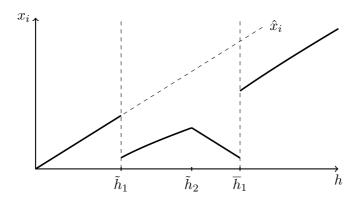
Policy when $\mu_{11} \geqslant q > \mu_1$



Policy when $\mu_{11} \geqslant q > \mu_1$



Policy when $\mu_{\geqslant 1} \geqslant q > \mu$



TAKEAWAYS

If the status quo is not too bad, the coalition is socially beneficial and aggregates the groups' information.

It only forms if the groups are not too diverse.

If the status quo is weak, the policymaker would prefer competition.

The coalition forms if the groups are diverse, and there is lobbying for higher diversity than in the first case.

More policy moderation coincides with "persuasive coalitions," which are more likely to be successful but induce the implementation of worse policies on average.

Diverse coalitions are more likely to be successful, but precisely because they don't aggregate information.

ENDOGENOUS INFORMATION

ENDOGENOUS INFORMATION

Valence is $y_x = \left(\frac{\omega_1^{\rho} + \omega_2^{\rho}}{2}\right)^{\frac{1}{\rho}}$, where $\omega(x) \in \Omega = \{0, 1\}^2$ is iid with $\Pr(\omega_i(x) = 1) = \mu$.

 $-\rho \in [0,1]$ measures how **substitutable** the dimensions are.

Let $\mu_0 \in \Delta(\Omega)$ be the distribution of $\omega(x)$.

- If $\mu_0(1,1) = \mu^2$ then ω_1, ω_2 are uncorrelated.
- If $\mu_0(1,1) = \mu$ then $\omega_1 = \omega_2$, perfectly correlated.
- $-\mu_0(1,1)$ measures how **substitutable** information about each dimension is.

Group i can gather information about $\omega_i(x)$. They can observe the realization of a signal, i.e., a distribution of posteriors $\sigma \in \Delta(\Delta(\{0,1\}))$ with $\int p \, d\sigma(p) = \mu$.

If the groups form a coalition, they can observe a realization of a signal about $\omega(x)$, i.e., a distribution of posteriors $\sigma \in \Delta(\Delta(\Omega))$ with $\int p \, d\sigma(p) = \mu_0$.

Competition

With public endogenous information we can assume that there is full disclosure in equilibrium (Gentzkow and Kamenica 2017).

Suppose that the groups lobby for their ideal policy.

They can simultaneously send signals $\sigma_i \in \Delta([0,1])$ with $\int p \, d\sigma_i = \mu$.

P implements x_i if $p_i \ge p$ and $p_i \ge p_{-i}$, where

$$\underline{p} = \frac{\mu[(1-\mu)q - \lambda(\mu - \mu_0(1,1))]}{(1-\mu)\mu_0(1,1) + (1-2\mu)\lambda(\mu - \mu_0(1,1))},$$

where $\lambda = 2^{-\frac{1}{\rho}}$. This is decreasing in ρ and $\mu_0(1,1)$.

The more complementarity, the harder it is to persuade P alone.

Result

Suppose that each group lobbies for their ideal policy and $\underline{p} < 1$. If the group diversity h increases, the equilibrium signals become weakly more informative.

If
$$0 \leqslant h^2 \leqslant \frac{(1-\underline{p})(1+\underline{p}-2\mu)}{2\mu}$$
 then

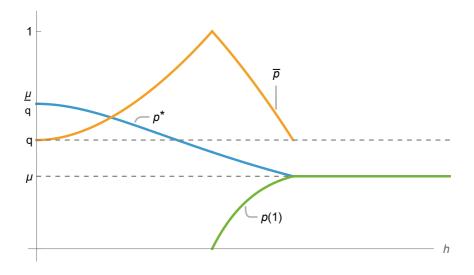
$$\sigma_i^* = \begin{cases} 0 & \text{with probability } 1 - p^*, \\ U[\underline{p}, \overline{p}] & \text{with probability } p^*. \end{cases}$$

If
$$\frac{(1-\underline{p})(1+\underline{p}-2\mu)}{2\mu}\leqslant h^2\leqslant \frac{2(1-\underline{p})(1-\mu)}{(2-\underline{p})\mu}$$
 then

$$\sigma_i^* = \begin{cases} 0 & \text{with probability } 1 - p^*, \\ U[\underline{p}, 2 - \overline{p}] & \text{with probability } p^* - p^1, \\ 1 & \text{with probability } p^1. \end{cases}$$

If $h^2 \geqslant \frac{2(1-p)(1-\mu)}{(2-p)\mu}$ then the signals are perfectly informative.

More Diversity \Rightarrow More Information



Information by a Coalition

The coalition chooses a signal $\sigma \in \Delta(\Delta(\Omega))$ such that $\int p \, d\sigma(p) = \mu_0$ to maximize the probability that the policy is accepted:

$$\int \mathbf{1}[p(1,1) + \lambda(p(1,0) + p(0,1)) \ge q] \, d\sigma(p).$$

The optimal signal implements the policy with probability

$$\min\left\{\frac{(1-2\lambda)\mu_0(1,1)+2\lambda\mu}{q},\frac{(1-\lambda)\mu_0(1,1)}{q-\lambda}\right\}$$

for any $q \in [\mu, 1]$. It either pools (1, 1), (1, 0), (0, 1) with some (0, 0), or pools (1, 1) with some (1, 0), (0, 1).

The coalition always leaves P indifferent between accepting and rejecting the proposal.

TOGETHER OR ALONE?

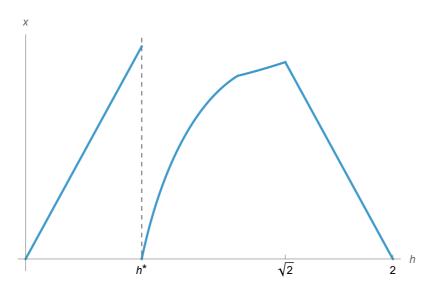
If $\underline{p} > 1$ then the groups cannot persuade P to implement their proposal alone. They have to form a coalition, or not lobby.

If $\underline{p} \leq 1$ then the groups have a choice. More diversity makes the coalition more appealing for two reasons:

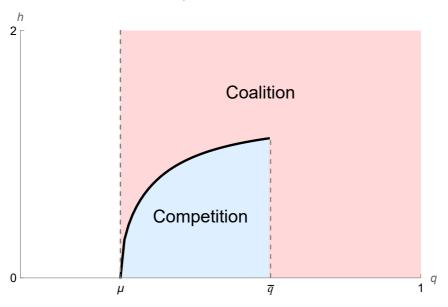
- With more diversity competition is more fierce, and the groups are less influential.
- Also the stakes are higher, and they would rather settle for a compromise.

There is a threshold h^* such that the groups form a coalition iff $h \ge h^*$.

DIVERSITY AND COMPROMISE



EQUILIBRIUM



Complementarity and Information

More complementarity forces the groups to form a coalition.

The coalition provides information about both dimensions of the state. The groups combine their expertise.

But they don't provide more information in the Blackwell sense.

Challenge for empirical research: seeing a coalition provide information about more dimensions of a policy doesn't imply that the coalition is providing more valuable information.

With endogenous information the only way to extract information is by inducing competition.

CONCLUSION

Simple model that rationalizes empirical findings in the literature:

- Coalitions are not more effective than competition unconditionally (Mahoney and Baumgartner 2004).
- Coalitions are more effective than (counterfactual) competition when groups are diverse (Junk 2019; Dwidar 2022).
- Coalitions are more likely when the other "side" is strong (Hojnacki 1997).

However, very different mechanism and normative implications:

- Coalitions sometimes don't aggregate but actually *reduce* the information provided to policymakers.
- Policy compromise in a coalition can be associated with low information provision rather than consensus.
- Diverse coalitions can be more effective at the expense of leading to worse policies on average.

Applications beyond lobbying?