

Informational Lobbying and Implementation Standards

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Policymaking is a complex process & knowledge matters

- Policymakers are called upon to make decisions on a wide range of issues about which they have limited knowledge ([Esterling, 2009](#); [Baumgartner and Jones, 2015](#); [Curry, 2015](#)).
 - This gives an important role to those who can produce information and make it available to policymakers:
 - ▶ Public sector bodies, such as regulatory or administrative agencies ([Carpenter, 2014](#); [Demortain, 2020](#))
 - ▶ Interest groups (IGs henceforth; [Grossman and Helpman, 2001](#)).
 - IGs have vested interests and preference over policies ⇒ IGs may not provide policymakers with the information they need.
- ⇒ Can policymakers take steps to ensure that IGs provide (more) information?

What I do in this paper - I

- I analyse a model in which a politician wants to make the right decision, while an IG favours a specific policy and can provide verifiable information of *ex-ante* unknown accuracy at a cost.
- I focus on the role of *implementation standards*: how likely to be good a policy must be to be implemented by the politician:
 - ▶ Example: policy A can be good or bad. If it is good, it yields a payoff of 10. If it is bad, it yields a payoff of -5. The status-quo policy yields a payoff of 0. An *implementation standard* specifies a belief on the probability that the policy is good above which the policy is implemented and below which is it not.
- I first show how, under *ex-post* optimal implementation standards, the IG might refrain from providing information, an *upper* or a *lower lack of informational lobbying*.

What I do in this paper - II

- I show how *ex-ante* set implementation standards can solve these, with a higher standard (for an *upper lack of informational lobbying*) or a lower standard (for a *lower lack of informational lobbying*).
- I argue that *ex-ante* implementation standards can act as a substitute or complement to information acquisition by policymakers.
- I discuss various institutional fixes that can allow politicians to commit *ex-ante* to implementation standards and their (possible) drawbacks:
 - ▶ The precautionary principle.
 - ▶ Bureaucratic delegation.
 - ▶ Legislative committees.

Related literature

The model

The model - Players, actions, and preferences I

- 2 players: a politician and an IG.
- An *ex-ante* unknown state of the world $\theta \in \{A, B\}$ with prior belief $\pi := Pr(\theta = A)$.
- The politician's task is to pick a policy $p \in \{a, b\}$. His utility depends on the implemented policy and the state of the world:

$$U(\theta, p) = \begin{cases} 0 & \text{if } \theta = A \text{ and } p = a \text{ or if } \theta = B \text{ and } p = b \\ -1 & \text{if } \theta = A \text{ and } p = b \\ -\kappa & \text{if } \theta = B \text{ and } p = a \end{cases}$$

with $\kappa > 0$.

The model - Players, actions, and preferences II

- The IG has state-independent preferences:

$$V(p) = \begin{cases} 1 & \text{if } p = a \\ 0 & \text{if } p = b \end{cases},$$

- If it engages in informational lobbying, the IG pays a cost $c \in (0, 1)$ and a symmetric binary signal σ about the state of the world is drawn:

$$Pr(\sigma = A | \theta = A) = Pr(\sigma = B | \theta = B) = q,$$

where q , the precision of the signal, is a random variable distributed on the support $[0.5, 1]$, drawn according to some density function $f(\cdot)$, with full support, and cumulative distribution function $F(\cdot)$.

- The drawn signal σ and precision q are publicly observed.

The model - Timing and solution concept

- Timing with an *ex-post* set implementation standard:
 - 1 Nature draws the state of the world $\theta \in \{A, B\}$.
 - 2 Without observing θ , the IG decides to engage in informational lobbying or not.
 - 3 Based on his (possibly updated) belief π^I , the politician implements a or b .

- Timing with an *ex-ante* set implementation standard:
 - 1 Nature draws the state of the world $\theta \in \{A, B\}$.
 - 2 Without observing θ , the politician select an implementation standard $\tau \in (0, 1)$.
 - 3 After observing τ but not θ , the IG decides to engage in informational lobbying or not.
 - 4 Based on his (possibly updated) belief π^I and τ , the politician implements a or b .

- The solution concept is perfect Bayesian equilibrium (equilibrium henceforth).

Discussing the assumptions 1

Discussing the assumptions 2

Ex-post implementation standards

- The politician is only willing to implement policy a provided that he is confident enough that such policy is warranted, which is the case whenever

$$(1 - \pi^l)(-\kappa) \geq -\pi^l \Leftrightarrow \pi^l \geq \frac{\kappa}{\kappa + 1}.$$

- I define $\frac{\kappa}{\kappa+1} := t^P$, the *ex-post* optimal implementation standard.
- The IG doesn't lobby when $\pi \geq t^P$: the politician implements $p = a$ without lobbying. By lobbying, the IG would run the risk of producing a sufficiently strong signal $\sigma = B$, making the politician implement $p = b$, and incur the cost c .

→ An *upper lack of informational lobbying*.

Intuitions - II

- When the prior is unfavourable ($\pi < t^P$), absent informational lobbying the politician implements $p = b$.
- For $p = a$ to have any chance of being implemented, the IG must engage in informational lobbying.
- It comes at a cost c and might not be successful. When is it worth it?
 - ① Even with q equal to 1, the politician would still implement $p = a$ only upon observing a signal $\sigma = A$.
 - ② Moreover, only a sufficiently precise signal $\sigma = A$ can convince the politician to implement $p = a$.
- To overcome the politician's unfavourable prior, q must be such that:

$$\frac{q\pi}{q\pi + (1 - \pi)(1 - q)} \geq t^P \iff q \geq \frac{(1 - \pi)t^P}{\pi + t^P - 2\pi t^P} := \tilde{q}_{\tau=t^P}(\pi),$$

- Given $\tilde{q}_{\tau=t^P}(\pi)$, the minimally sufficient precision, the IG's expected payoff from engaging in informational lobbying is:

$$Pr(q \geq \tilde{q}(\pi)) \times \left[\pi E[q|q \geq \tilde{q}(\pi)] + (1 - \pi) \left[1 - E[q|q \geq \tilde{q}(\pi)] \right] \right] - c; \quad (1)$$

- A sufficiently precise A signal makes the politician implement $p = a$ rather than $p = b$ when:
 - $\theta = a$ and the signal is correct.
 - $\theta = b$ and the signal is wrong.
- The IG only engages in informational lobbying if it is necessary ($\pi < t^P$) and not too costly relative to the chances of success (i.e. (1) positive). When $\pi < t^P$ but (1) is negative,

→ A lower lack of informational lobbying.

Proposition 1

Ex-ante implementation standards

When lobbying occurs with the *ex-post* optimal standard

- Claim: Suppose the conditions of proposition 1 for informational lobbying to occur hold. There are no *ex-ante* implementation standards different from t^P that could increase the politician's welfare.
- The argument: Picking an implementation standard different from t^P wouldn't bring any additional benefit – the IG already engages in informational lobbying with an implementation standard of t^P .
- Moreover, it could lead to:
 - ▶ Ex-post inefficiencies: implement a with $\pi^I < t^P$ or implement b with $\pi^I > t^P$
 - ▶ A lack of informational lobbying.

Dealing with an *upper lack of informational lobbying*

- A threshold lower than t^P wouldn't help: it wouldn't affect the incentives of the IG to engage in lobbying and would lead to *ex-post* inefficiencies.
- Can higher implementation standards than t^P help? Yes, but only under some conditions:
 - ① High enough accuracy of informational lobbying:
 - ★ With a standard τ higher than t^P , the politician commits to the possibility of *ex-post* inefficiencies, if $\pi^I \in (t^P, \tau)$.
 - For this not to happen, the drawn q must be sufficiently high.
 - ② Sufficient incentives for the IG to engage in informational lobbying:
 - ★ Need $\tau > t^P$ to incentivise informational lobbying.
 - ★ But the cost also matters... c can't be too high.

Proposition 2

Dealing with a *lower lack of informational lobbying*

- Can implementation standards lower than t^P help? Yes, but only under some conditions:
 - ① Sufficient incentives for the IG to engage in informational lobbying:
 - ★ Need $\tau \in (\pi, t^P)$ to incentivise informational lobbying.
 - ★ The precision and the cost matters: can the IG reach often enough the standard?
 - ② High enough value of informational lobbying for the politician:
 - ★ With a standard τ lower than t^P , the politician commits to the possibility of *ex-post* inefficiencies, if $\pi^I \in (\tau, t^P)$.
- For this not to happen, the drawn q must be sufficiently high.

Proposition 3

Discussion

Internal and external information provision

- Setting implementation standards *ex-ante* to induce informational lobbying by IGs can act as a substitute/complement to information acquisition by policymakers. Policymakers can shift some or all of the costs of information acquisition to IGs.
- May be desirable for them, provided that IGs can produce research at a sufficiently low cost and with a sufficiently high accuracy.

Related work

The precautionary principle

- With an *upper lack of informational lobbying*, my results provide a formal justification for the precautionary principle: raising the implementation standard shifts the burden of the proof to the interested party, who must provide evidence in support of their preferred policy.
- As critics of the precautionary principle argue (e.g. [Morris, 2000](#)), committing to a higher standard can prevent desirable policies' implementation. But without it there would be no credibility in the informational requirement!
- However, criticisms of the precautionary principle can be justified in some instances:
 - ▶ A politician who raises the implementation standard to a level at which the IG does not wish to engage in informational lobbying when he would have implemented the IG's preferred policy with the *ex-post* optimal implementation standard, harms all actors.
 - ▶ If the problem is a *lower* lack of informational lobbying, raising the implementation standard moves it in the wrong direction.

(Bureaucratic) Delegation

- Why might policymakers resort to delegation (according to this paper)? To credibly set implementation standards that differ from their *ex-post* optimal implementation standard.
 - According to the *ally principle*, "if the legislature has a choice of agencies to which it can delegate, then it prefers the agency whose preferences are most similar to its own" (Gehlbach, 2021). Here, it may fail because of the interaction with a third party from whom information provision may be desirable, but whose interests are misaligned with those of the principal.
 - Depending on prior beliefs, different types of delegates may be desirable:
 - ▶ A regulator with laxer *ex-post* optimal standards when a *lower lack* of informational lobbying from regulated firms is expected.
 - ▶ A regulator with stricter *ex-post* optimal standards when an *upper lack* of informational lobbying is expected.
- A (not *regulatory capture* based (Carpenter and Moss, 2013)) explanation for bureaucratic agencies' different ethe (some are more consumer-friendly, others are more business-friendly).

Committee appointments

- Delegation also occurs *within* the legislature, e.g. when choosing who will chair a committee or who will become part of it. Should they be representative?
- Here: the interaction between external providers of information and the legislature and the desire to incentivise information provision can lead to the choice of committees unrepresentative of the broader legislative assembly.
- Especially relevant given the recent trends of decline in legislative capacity ([LaPira, Drutman and Kosar, 2020](#)): by forming unrepresentative committees, legislatures can reduce their informational and organisational disadvantage.

Conclusion

Conclusion

- In this paper, I show how and when *ex-ante* set implementation standards can improve welfare by inducing more informational lobbying than the *ex-post* optimal one.
- I discuss bureaucratic politics, legislative politics, and the precautionary principle in light of my analysis.
- This paper is part of my research agenda on institutions and political influence, in which I study how institutions shape political influence and how institutions can be shaped to improve the quality of political influence.

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Related literature

- Lobbying, and in particular *information-based* models of lobbying, e.g. [Potters and Van Winden \(1992\)](#); [Austen-Smith \(1998\)](#); [Cotton \(2012\)](#); [Schnakenberg \(2017\)](#); [Ellis and Groll \(2020\)](#); [Awad \(2020\)](#); [Awad and Minaudier \(2022, 2023\)](#)
 - ▶ Contributions: I focus on the incentives for an IG to engage in informational lobbying, and the ability of policymakers to induce it; I assume verifiable information with an *ex-ante* uncertain level of precision.
- On the technical side, the literature on information acquisition and transmission under conflict of interests, e.g. [Li \(2001\)](#); [Li and Suen \(2004\)](#); [Stephenson \(2008\)](#); [Chan et al. \(2018\)](#); [Henry and Ottaviani \(2019\)](#)
 - ▶ Contributions: preference-based implementation standards, allowing me to study when and why IGs might refrain from providing information, discuss which institutional remedies can enable commitment and how and when it can help.

Discussing the modelling approach - I

- I assume an *ex-ante* uncertain precision level for the IG's signal about the state of the world.
- Different from the assumption of an *ex-ante* known precision level for the signal received by an IG (see in, e.g., [Austen-Smith and Wright, 1992](#); [Cotton and Dellis, 2016](#); [Schnakenberg, 2017](#); [Schnakenberg and Turner, 2019](#))
 - To capture the inherent messiness of knowledge production and the difficulty of reaching definite conclusions about the effects of policies or products.
- It also differs from what's in models in which IGs choose the precision of the signals they send to politicians (see recently in, e.g., [Awad and Minaudier, 2022](#); [Minaudier, 2022](#); [Zerbini, 2022](#)).
 - I focus on the extensive margin of informational lobbying by IGs, i.e. whether to provide information at all.

Discussing the modelling approach - II

- The politician's utility function allows me to distinguish between different weightings of mismatch (as in [Fox and Van Weelden, 2012](#); [Merzoni and Trombetta, 2022](#)).
 - ▶ e.g. a regulator's decision to allow or not a new pesticide: not granting a license to a harmless pesticide need not cause the same disutility than granting a license to a harmful one.
- The approach is also equivalent, up to some relabelling and normalisation, to assuming that the politician has a bias in favour of a policy, (e.g., [Dahm and Porteiro, 2008a,b](#)).

Proposition 1

Proposition 1

The following holds in equilibrium:

- If $\pi^l \geq t^P$, the politician implements $p = a$. If $\pi^l < t^P$, the politician implements $p = b$.
- The IG engages in informational lobbying if and only if $\pi < t^P$ and:

$$\Pr(q \geq \tilde{q}_{\tau=t^P}(\pi)) \times \left[\pi E[q|q \geq \tilde{q}_{\tau=t^P}(\pi)] + (1 - \pi) \left[1 - E[q|q \geq \tilde{q}_{\tau=t^P}(\pi)] \right] \right] \geq c.$$

Proposition 2

Proposition 2

Suppose there is an upper lack of informational lobbying under $\tau = t^P$. If $E[q] > \frac{\pi}{(1-\pi)\kappa + \pi}$, for c sufficiently small, there exist implementation standards strictly greater than t^P under which the politician is strictly better off than under t^P .

Proposition 3

Proposition 3

Suppose there is a lower lack of informational lobbying under $\tau = t^P$. If $E[q] > \frac{c+\pi-1}{2\pi-1}$ and $\tau^{lob} > \tau^{inf}$, there exist implementation standards strictly lower than t^P under which the politician is strictly better off than under t^P .

- τ^{inf} : the lowest implementation standard $\in [\pi, t^P)$ for which the politician is at least as well off with information provision as under t^P without information provision.
- τ^{lob} , the highest implementation threshold for which the IG is willing to provide information.

- Recent works in the literature have also explored the interaction between the provision of information by IGs and the acquisition of information by policymakers.
 - ▶ In multi-issues policy environments, [Kirneva \(2023\)](#) shows how a single IG caring about multiple policy issues can provide information on one issue to *divert attention* from less favourable issues, while [Cotton and Dellis \(2016\)](#) argue that an IG's information provision can shift policymakers' priorities.
 - ▶ [Minaudier \(2022\)](#) and [Bos \(2023\)](#) consider models in which policymakers acquire information prior to informational lobbying by IGs. They study, respectively, how confidentiality about their investigations can allow policymakers to extract more information from IGs, and how staff hiring can affect whether IGs engage in informational lobbying.