Online Appendix
"Local Evidence and Diversity in Minipublics"

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D Axiomatization of the Ornstein-Uhlenbeck correlation structure

The Ornstein-Uhlenbeck process introduced in Assumption 2 uniquely satisfies the following set of natural axioms on the outcome mapping β.

A.1 *(Principle of maximal ignorance)* For any group of citizens $\{i_1, \ldots, i_n\}$, outcomes $\{\beta(i_1), \ldots, \beta(i_n)\}$ follow a multivariate Gaussian distribution.

A.2 *(Similar citizens, similar outcomes)* $\beta(\cdot)$ is almost surely continuous.

A.3 *(Identical outcome uncertainty)* For each $i \in [0, 1]$, $\beta(i) - \bar{B} \sim \mathcal{N}(0, 1)$.

A.4 *(Distance-based correlation)* For any two $i_1, i_2 \in [0, 1]$, the correlation between $\beta(i_1)$ and $\beta(i_2)$ depends only on the distance $|i_1 - i_2|$.

A.5 *(Look to your left, look to your right)* For any $i_1 < \ldots < i_k < \ldots i_n$, the distribution of $\beta(i_k)$ depends on the outcomes of other citizens in the set only through $\beta(i_{k-1})$ and $\beta(i_{k+1})$.

Axiom A.1 imposes a general Gaussian structure, whereas Axioms A.2-A.5 specify additional properties. A.1 can also be interpreted as a maximal-ignorance desideratum. The Gaussian distribution maximizes entropy among all unbounded distributions of a fixed mean and variance, therefore the Gaussian structure allows one to draw the weakest conclusions possible from a set of outcomes. A.2 requires that for any two citizens that are arbitrarily close to each other, their realized outcomes are also close. A.3 requires that all citizens face the same uncertainty about their outcomes. In understanding how informative a citizen's outcome is for the rest of the citizenry, this axiom allows

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us to isolate the role of the citizen's position in $[0,1]$ from the role of the outcome uncertainty that he faces. Axioms A.4 and A.5 specify how a citizen's position determines his correlation to other citizens. Correlation between any two citizens' outcomes depends only on how far the two citizens are from each other (A.4). Moreover, given a set of citizens the outcomes of which are observed, the best conjecture for the outcome of any citizen outside this set depends only on the outcomes of his closest neighbors in this set (A.5).

Corollary D.1, which follows from Theorem 1.1 of Doob (1942), establishes that not only does the Ornstein-Uhlenbeck process satisfy this set of natural axioms A.1-A.5, but it is the *only* stochastic process that does so.

Corollary D.1 (Doob (1942)). *The Ornstein-Uhlenbeck process on domain* $[0,1]$ *uniquely satisfies Axioms A.1 - A.5.*

E General distributions

Let F denote the distribution of the policymaker's threshold of adoption with full support over $(-\infty,\infty)$ with continuously differentiable density f. The citizen's interim payoff for a realized post-minipublic value $\tilde{B} \in \mathbb{R}$ is

$$v(\tilde{B}) := \tilde{B}\,\Pr(c \leqslant \tilde{B}) = \tilde{B}F(\tilde{B}).$$

Note that $v(0)=0$, $v'(\tilde{B})>0$ for $\tilde{B}>0$, $\lim_{\tilde{B}\to+\infty} v(\tilde{B}) = +\infty$, and $\lim_{\tilde{B}\to-\infty} v(\tilde{B}) = 0$ from below. The following lemma identifies a sufficient condition for v to be U-shaped. We say that a function $h(x)$ is concave-convex-concave in x if there exists $x_1, x_2 \in \mathbb{R}\cup\{-\infty,+\infty\}$ such that $h(x)$ is concave for $x \leqslant x_1$ and $x \geqslant x_2$, and convex for $x \in (x_1,x_2)$.

Lemma E.1. *Let f be log-concave. Then $v(\tilde{B})$ is (i) U-shaped in $\tilde{B}$ and (ii) concave-convex-concave in $\tilde{B}$.*

Proof. (i) The interim payoff v is first decreasing and then increasing if its derivative $v'(\tilde{B}) := \tilde{B}f(\tilde{B}) + F(\tilde{B})$ is single-crossing in $\tilde{B}$, in the sense that if $v'(\tilde{B})>0$, then $v'(\tilde{B}')>0$ for any $\tilde{B}'>\tilde{B}$. First, note that $v'(\tilde{B})>0$ for any $\tilde{B}\geqslant 0$. Consider $\tilde{B}<\tilde{B}'<0$. Because f is log-concave, F is also log-concave and the ratio f/F is nonincreasing.[1] Hence, if $v'(\tilde{B})>0$ then

$$\tilde{B}'\frac{f(\tilde{B}')}{F(\tilde{B}')} > \tilde{B}\frac{f(\tilde{B}')}{F(\tilde{B}')} \geqslant \tilde{B}\frac{f(\tilde{B})}{F(\tilde{B})} > -1$$

[1]For standard properties and examples of log-concave densities, see Bagnoli and Bergstrom (2005).

which implies that $v'(\tilde{B}) > 0$ as well. Similarly, by log-concavity of f, $v'(\tilde{B}) < 0$ for $\tilde{B} \ll 0$. This implies that v' is single-crossing in $\tilde{B}$ from below.

(ii) We need to inspect the sign of $v''(\tilde{B}) = 2f(\tilde{B}) + \tilde{B}f'(\tilde{B}) \Rightarrow v''(\tilde{B})/f(\tilde{B}) = 2 + \tilde{B}f'(\tilde{B})/f(\tilde{B})$. By the log-concavity of f, the ratio $f'(\tilde{B})/f(\tilde{B})$ is nonincreasing in $\tilde{B}$. The log-concavity of f implies that f is unimodal, so f' changes sign only once from above—suppose without loss that the mode is at $\tilde{B}_0 > 0$. Consider first $\tilde{B} < 0$. Then $\tilde{B}f'(\tilde{B})/f(\tilde{B})$ is increasing in $\tilde{B} < 0$. But $v''(0) > 0$, so v'' changes sign at most once over $\tilde{B} \in (-\infty, 0)$. For $\tilde{B} \in (0, \tilde{B}_0)$, $\tilde{B}f'(\tilde{B})/f(\tilde{B}) > 0 > -2$, so $v''(\tilde{B}) > 0$. For $\tilde{B} \geqslant \tilde{B}_0$, $\tilde{B}f'(\tilde{B})/f(\tilde{B}) < 0$ and decreasing, so v'' changes sign at most once over $(\tilde{B}_0, \infty)$. If $\lim_{\tilde{B}\to-\infty} \tilde{B}f'(\tilde{B}) < -2$ ($\lim_{\tilde{B}\to+\infty} \tilde{B}f'(\tilde{B}) < -2$) then v is strictly concave for $\tilde{B}$ sufficiently negative (positive). ■

Some log-concave distributions that are widely used in economic applications are the Laplace distribution, the extreme value distribution, the exponential distribution, and the Gamma distribution.

Consider a family of distributions over post-minipublic values $\{G_b(\tilde{B})\}_{b\in[0,\infty)}$ such that each G has a binary support over $\{\bar{B} - \underline{b}, \bar{B} + \bar{b}\}$, where $\underline{b}, \bar{b} > 0$, with probabilities p and $1 - p$, respectively. For Bayes rule to hold, it must be that $\bar{b} = \underline{b}p/(1 - p)$. The support expands, in the sense that both post-minipublic values are further away from $\bar{B}$, as $\underline{b}$ increases. Hence, $\underline{b}$ is a proxy for spread. The expected payoff of the citizen is

$$\tilde{V}_C(\underline{b}) = p(\bar{B} - \underline{b})F(\bar{B} - \underline{b}) + (1 - p)(\bar{B} + \bar{b})F(\bar{B} + \bar{b}).$$

Analogously to our baseline analysis, we seek to understand the monotonicity of $\tilde{V}_C$ in the spread $\underline{b}$ in this setting with a log-concave threshold distribution and binary distribution over post-minipublic values. The shape of the citizen's expected payoff is qualitatively the same as in our baseline Gaussian model for $\underline{b}$ sufficiently close to zero and sufficiently far from zero. We first show that for $\underline{b}$ sufficiently large, the citizen's expected payoff increases in $\underline{b}$ and the citizens prefer the lottery over post-minipublic values $\{\bar{B} - \underline{b}, \bar{B} + \bar{b}\}$ to no lottery.

Proposition E.1. *Let f be log-concave. There exists $\overline{\beta} > 0$ such that for all $\underline{b} > \overline{\beta}$, $\tilde{V}_C(0) < \tilde{V}_C(\underline{b})$ and $\partial\tilde{V}_C(\underline{b})/\partial\underline{b} > 0$.*

Proof. Because $\lim_{B\to-\infty} v(B) = 0$ and $\lim_{B\to+\infty} v(B) = \infty$, it holds that $\lim_{\underline{b}\to\infty} (1 - p)v(\bar{B} + \underline{b}p/(1 - p)) + pv(\bar{B} - \underline{b}) = +\infty$ for any $p \in (0, 1)$. Hence, for any $\bar{B}$ and any p, there exists $\overline{\beta}$ such that (i) $(1 - p)v(\bar{B} + \overline{\beta}p/(1 - p)) + pv(\bar{B} - \overline{\beta}) > \bar{B}$, (ii) $v(\bar{B} + \overline{\beta}p/(1 - p)) > 0$, and (iii) $v(\bar{B} - \overline{\beta}) < x_1$. This implies that for all $\underline{b} > \overline{\beta}$, $v(\bar{B} - \underline{b})$ and $v(\bar{B} + \bar{b}p(1 - p))$ are both increasing in $\underline{b}$. Hence, $\tilde{V}_C$ is increasing in $\underline{b}$ for any $\underline{b} > \overline{\beta}$. ■

By the same effect which led to the curse of too little information in the baseline model, here, a small amount of information (via a small mean preserving spread) can strictly harm the citizens if the prior value $\bar{B}$ corresponds to low expected misalignment.

Proposition E.2. *Let f be log-concave and $\bar{B}$ lie in a concave region of v, i.e., $\bar{B} < x_1$ or $\bar{B} > x_2$. Then, there exist $\underline{\beta} > 0$ such that $\partial \tilde{V}_C(\underline{b})/\partial \underline{b} < 0$ for all $\underline{b} < \underline{\beta}$.*

Proof. By the premise, because $\bar{B}$ lies strictly in the concave region, there exists $\underline{\beta}$ sufficiently small such that for all $\underline{b} < \underline{\beta}$, $\bar{B} - \underline{b}$ and $\bar{B} + \underline{b}p/(1-p)$ lie both in the same concave region around $\bar{B}$. The result follows because a higher $\underline{b}$ corresponds to a mean preserving spread along a concave interim payoff, which reduces the expected payoff $\tilde{V}_C$. ∎

When is $\tilde{V}_C$ quasiconvex on the entire domain? Beyond our Gaussian baseline model, this remains an open question for a general framework, even with a log-concave threshold density f. The following example points out one instance in which, among two available experiments π_1 and π_2 such that π_2 is a mean-preserving spread of π_1, the citizen strictly prefers π_1 to both the uninformative experiment $\{\bar{B}\}$ and π_2; hence $\tilde{V}_C$ is not quasiconvex in this example.

Example 1 (Single-peaked payoff over ordered experiments)**.** Suppose the policymaker has a deterministic threshold $\bar{c} = 5$ and the prior value is $\bar{B} = 8$. Let π_0 denote the uninformative experiment with degenerate distribution at $\{\bar{B}\}$. We consider two experiments π_1 and π_2 that induce the following distributions over post-minipublic values $\tilde{B}$:

$$\pi_1 : \begin{cases} -2 & \text{w.p.} \quad 1/3 \\ 13 & \text{w.p.} \quad 2/3 \end{cases}, \qquad \pi_2 : \begin{cases} -12 & \text{w.p.} \quad 1/9 \\ 3 & \text{w.p.} \quad 4/9 \\ 18 & \text{w.p.} \quad 4/9 \end{cases}.$$

It is straightforward to verify that the distribution corresponding to π_2 is a MPS of that corresponding to π_1. Then, $\tilde{V}_C(\pi_1) = 1/3 \cdot 0 + 2/3 \cdot 13 = 26/3 > 8$, so the citizen prefers π_1 to no information. However, $\tilde{V}_C(\pi_2) = 4/9 \cdot 18 = 8 = \tilde{V}_C(\pi_0)$. Therefore, the citizen strictly prefers π_1 to both π_0 and π_2, so $\tilde{V}_C$ is no longer quasiconvex over a sequence of ordered experiments $\{\pi_0, \pi_1, \pi_2\}$.

F Additional results for Section 4.2

F.1 General characterization

Lemma F.1. *If $\mathbf{m}^*$ has the (δ, Δ)-alternating pattern, then no Δ-equidistant minipublic is feasible.*

Proof. We prove the contrapositive. Suppose the set of feasible Δ-equidistant minipublics is nonempty, and let Δ' be the smallest distance across all minipublics in this set, corresponding to $\mathbf{m}' = \{i'_1, i'_2, ..., i'_n\}$. First, consider a (δ, Δ)-alternating minipublic with $i''_2 \leqslant i'_2$ and $i''_{n-1} = 1 - i''_2 \geqslant i'_{n-1} = 1 - i'_2$. Such a minipublic has strictly lower informativeness than the Δ''-equidistant minipublic with the same i''_2 and i''_{n-1}. In turn, this Δ''-equidistant minipublic is less informative than the $\Delta'-$equidistant minipublic because $\Delta'' \geqslant \Delta'$. Hence, any (δ, Δ)-alternating minipublic with $i''_2 \leqslant i'_2$ is suboptimal. Second, consider a (δ, Δ)-alternating minipublic with $i''_2 > i'_2$ and $i''_{n-1} = 1 - i''_2 < i'_{n-1} = 1 - i'_2$. The passive informativeness of i''_1 in this minipublic is strictly lower than the passive informativeness of the leftmost citizen in the $\Delta''-$ equidistant minipublic with the same i''_2 and i''_{n-1}. But the leftmost citizen is passive in the Δ''-equidistant minipublic because $\Delta'' < \Delta'$. Hence, i''_1 must be passive in the (δ, Δ)-alternating minipublic as well. Therefore, (δ, Δ)-alternating minipublic with $i''_2 > i'_2$ is not feasible. ∎

Lemma F.2. *Let $n \geqslant 5$ odd and $\mathbf{m}^* \neq \mathbf{m}^f_n$. The optimal minipublic is either of the Δ-equidistant pattern or empty. Moreover, if the (ED) constraints of all citizens are violated in $\mathbf{m}^f_n$, then $\mathbf{m}^* = \emptyset$.*

Proof. By Proposition 4.3, any optimal (δ^*, Δ^*)-alternating minipublic has $i^*_3 - i^*_2 = i^*_{n-1} - i^*_{n-2} = \Delta^*$. For n odd, this is impossible since there is an even number of alternating distances between i^*_2 and i^*_{n-1}. Hence, if $\mathbf{m}^* \neq \emptyset$ then $\mathbf{m}^*$ is Δ-equidistant with $\Delta > \Delta^f$. This implies that $M^{ou}_3(\mathbf{m}^*) > M^{ou}_3(\mathbf{m}^f_n)$. But i^f_3 is passive in $\mathbf{m}^f_n$, so i^*_3 is passive in $\mathbf{m}^*$ as well. ∎

F.2 Formal results for "Demographic diversity and representativeness"

Lemma F.3. *Suppose the Ornstein-Uhlenbeck structure of Section 4.2.2. For any $j = 1, \ldots, n$, $i^f_j < j/(n+1)$ for $i^f_j < 1/2$ and $i^f_k > k/(n+1)$ for $i^f_k > 1/2$.*

Proof. In order to show that $i^f_1 < 1/(n+1)$, we invoke the first-order condition of Σ_{ou} with respect to i^f_1. The function

$$g(i_1) := 1 - e^{-i_1/\ell} + \tanh\left(\frac{1 - 2i_1}{2\ell(n-1)}\right)$$

is strictly increasing in i_1. Moreover, $g(1/(n+1)) > 0$. Because $g(i^f_1) = 0$ by FOC, then $i^f_1 < 1/(n+1)$. By a similar argument, $i^f_n > n/(n+1)$. The rest of the claim follows because both $\mathbf{m}^f_n$ and $\{1/(n+1), \ldots, n/(n+1)\}$ are symmetric about 1/2 and $i^f_n - i^f_1 > (n-1)/(n+1)$. ∎

Lemma F.4. *Suppose the Ornstein-Uhlenbeck structure of Section 4.2.2. For any $\mathbf{m} = \{i_1, \ldots, i_n\}$,*

$$\Psi(\mathbf{m}) = \frac{1}{2}\ell\left(1 - e^{-2i_1/\ell}\right) + \frac{1}{2}\ell\left(1 - e^{-2(1-i_n)/\ell}\right) + \sum_{j=2}^{n} \ell + (i_j - i_{j-1})\left(1 - \coth\left(\frac{i_j - i_{j-1}}{\ell}\right)\right).$$

Proof. For each $i \in [0,1]$, the distribution of $\beta(i)$ conditional on $\beta(\mathbf{m})$ is Gaussian and it depends only on i's closest neighbors in $\mathbf{m}$. By Gaussian updating, the conditional variance of $\beta(i)$ given $\beta(\mathbf{m})$ is $e^{-(i_1-i)/\ell}$ for $i \in [0, i_1]$, $e^{-(i-i_n)/\ell}$ for $i \in [i_n, 1]$, and

$$\operatorname{csch}\left(\frac{i_j - i_{j-1}}{\ell}\right)\left(\sinh\left(\frac{i_j - i}{\ell}\right)e^{-(i-i_{j-1})/\ell} + \sinh\left(\frac{i - i_{j-1}}{\ell}\right)e^{-(i_j-i)/\ell}\right)$$

for $i \in [i_{j-1}, i_j]$. Integrating over each interval $[0,i_1], [i_1,i_2], \ldots, [i_n, 1]$ and adding up these terms gives the desired expression. ■

Example 2 ($\mathbf{m}_4^f$ more Ψ-representative than $\mathbf{m}^*$)**.** Fix $\ell = 3$ and $n = 4$. Figure 8(a) in the main text plots the first-best minipublic, the Ψ-maximal minipublic, and the optimal minipublic for $\tau = 1/2$ and $\bar{B} = 2.5182$. Using the characterization in Lemma F.4, it is straightforward to compute $\Psi(\mathbf{m}_4^f) = 0.968946$ and $\Psi(\mathbf{m}^*) = 0.968806$. Therefore, the first-best minipublic is more representative than the optimal minipublic with respect to Ψ. This is because in the optimal minipublic, the citizens i_2^* and i_3^* are shifted outwards towards the periphery by a large margin relative to the respective second and third citizen in the Ψ-maximal minipublic.

Example 3 ($\mathbf{m}^*$ more Ψ-representative than $\mathbf{m}_4^f$)**.** Following up on Example 2, we keep all parameters the same except for $\bar{B} = 2.517$. The first-best minipublic and the Ψ-maximal minipublic continue to be the same as before, because they depend only on ℓ. The optimal minipublic is distorted in such a way that each citizen in the optimal minipublic is between their counterpart in the first-best minipublic and their counterpart in the Ψ-maximal minipublic. See Figure 8(b) in the main text. By a similar calculation, $\Psi(\mathbf{m}^*) = 0.969053 > 0.968946 = \Psi(\mathbf{m}_4^f)$. This is an instance in which the optimal minipublic is more representative than the first-best one with respect to the measure Ψ.

G Formal results for Section 6

G.1 Private evidence discovery

We consider an alternative game of private evidence discovery in which the timing is as follows: (i) the policymaker chooses $\mathbf{m} \in \mathcal{M}_n$, (ii) each citizen $i \in \mathbf{m}$ decides whether to discover $\beta(i)$, which is observed by the rest of $\mathbf{m}$ but not the policymaker, (iii) a citizen j is drawn randomly with uniform probability from $\mathbf{m}$, (iv) citizen j sends a message $x \in \mathbb{R}$ about the post-minipublic value $\tilde{B} \in \mathbb{R}$ to the policymaker, and (v) the policymaker makes an adoption decision based on her belief $\mathbb{E}[B \mid x]$. A communication strategy for citizen j in (iv) is a distribution $\alpha(\cdot \mid \tilde{B})$ over $x \in \mathbb{R}$. Without loss, each equilibrium message $\tilde{x}$ can be relabelled so that $\tilde{x} = \mathbb{E}[B \mid \tilde{x}]$. An equilibrium is *informative* if there exists at least two equilibrium messages $\tilde{x}_0 \neq \tilde{x}_1$.

Proposition G.1. *In the private evidence discovery game described above: (i) the optimal minipublic is $\mathbf{m}^* = \mathbf{m}_n^f$; (ii) there exists an informative equilibrium in $\mathbf{m}_n^f$; (iii) in any informative equilibrium in $\mathbf{m}_n^f$, each citizen $i_j^f \in \mathbf{m}_n^f$ is active, each citizen follows the same communication strategy α^*, and there exist on-path messages x_0^*, x_1^* such that $\alpha^*(x_0^* \mid B_{\mathbf{m}_n^f}) = 1$ for $B_{\mathbf{m}_n^f} < 0$ and $\alpha^*(x_1^* \mid B_{\mathbf{m}_n^f}) = 1$ for $B_{\mathbf{m}_n^f} > 0$.*

Proof. Fix an arbitrary minipublic $\mathbf{m} \in \mathcal{M}_n$ and let $\hat{\mathbf{m}} \subseteq \mathbf{m}$ be the active minipublic with post-minipublic value $B_{\hat{\mathbf{m}}}$. Consider the following communication strategy: $\alpha(x_0 \mid B_{\hat{\mathbf{m}}}) = 1$ for $B_{\hat{\mathbf{m}}} < 0$ and $x_0 = \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} < 0]$, and $\alpha(x_1 \mid B_{\hat{\mathbf{m}}}) = 1$ for $B_{\hat{\mathbf{m}}} \geqslant 0$ and $x_1 = \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} \geqslant 0]$. Then $x_1 > 0 > x_0$. Also, suppose the policymaker assigns off-path belief $\mathbb{E}[B \mid B_{\hat{\mathbf{m}}} = 0] = 0$ to any other message $x \neq x_0, x_1$. It is straightforward that this strategy is a best response for any randomly drawn citizen $i \in \mathbf{m}$. Therefore, an informative equilibrium exists for any $\mathbf{m}, \hat{\mathbf{m}}$, and $i \in \mathbf{m}$. Now, given $\mathbf{m}, \hat{\mathbf{m}}$, and $i \in \mathbf{m}$, consider an arbitrary informative equilibrium α^* that assigns nonzero probability to messages $\mathcal{X}^* := \{x_0, x_1, \ldots, x_N\}$. Without loss, we can relabel these messages so that $\mathbb{E}[B \mid x_0] < \mathbb{E}[B \mid x_1] < \ldots < \mathbb{E}[B \mid x_N]$, or equivalently, $x_0 < x_1 < \ldots < x_N$. If $\alpha^*(x_k \mid B_{\hat{\mathbf{m}}}) > 0$ for $B_{\hat{\mathbf{m}}} < 0$, then it must be that $x_k \in \arg\min_{x \in \mathcal{X}^*} \mathbb{E}[B \mid x]$ because the probability of adoption $\Pr(c \leqslant x_k)$ is increasing in x_k. This implies that $x_k = x_0$. Hence, $\alpha^*(x_0 \mid B_{\hat{\mathbf{m}}}) = 1$ for any $B_{\hat{\mathbf{m}}} < 0$. By a similar argument, $\alpha^*(x_N \mid B_{\hat{\mathbf{m}}}) = 1$ for any $B_{\hat{\mathbf{m}}} > 0$. Hence the policymaker learns the sign of $B_{\hat{\mathbf{m}}}$. For $B_{\hat{\mathbf{m}}} = 0$, which is realized with zero probability, the citizens are indifferent across all messages. Therefore, in any informative equilibrium, any randomly drawn citizen generically (i.e., up to the message for $B_{\hat{\mathbf{m}}} = 0$) sends at most two messages: $x_0 = \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} < 0]$ for $B_{\hat{\mathbf{m}}} < 0$ and $x_1 = \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} > 0]$ for $B_{\hat{\mathbf{m}}} > 0$.

Next, we establish that in any $\mathbf{m}$ and for any informative equilibrium in the continuation game, every citizen $i \in \mathbf{m}$ is active with probability one. First, for any $\hat{\mathbf{m}} \subseteq \mathbf{m}$, the distribution of $B_{\hat{\mathbf{m}} \cup i}$ is a mean-preserving spread of $B_{\hat{\mathbf{m}}}$. Second, the interim payoff is $B_{\hat{\mathbf{m}}} \Pr(c \leqslant \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} > 0])$ if $B_{\hat{\mathbf{m}}} > 0$ and $B_{\hat{\mathbf{m}}} \Pr(c \leqslant \mathbb{E}[B \mid B_{\hat{\mathbf{m}}} < 0])$ if $B_{\hat{\mathbf{m}}} < 0$. Because this is a piecewise linear function with a lower slope for $B_{\hat{\mathbf{m}}} < 0$, the interim payoff is convex. Hence any citizen $i \in \mathbf{m}$ prefers to be active for any active subset $\hat{\mathbf{m}} \subseteq \mathbf{m}$. Therefore, any $\mathbf{m} \in \mathcal{M}_n$ is active for any informative equilibrium in the continuation game.

Finally, we show that $\mathbf{m}^* = \mathbf{m}_n^f$ for some $\mathbf{m}_n^f \in \mathcal{M}_n^f$. For any $\mathbf{m} \in \mathcal{M}_n$ and $\mathbf{m}_n^f \in \mathcal{M}_n^f$, the distribution of $B_{\mathbf{m}_n^f}$ is a mean-preserving spread of $B_{\mathbf{m}}$. Correspondingly, the distribution that assigns probability 1/2 to two posterior values

$$\left\{\mathbb{E}[B \mid B_{\mathbf{m}_n^f} < 0], \mathbb{E}[B \mid B_{\mathbf{m}_n^f} > 0]\right\}$$

is a mean-preserving spread of the distribution that assigns probability 1/2 to two posterior values $\{\mathbb{E}[B \mid B_{\mathbf{m}} < 0], \mathbb{E}[B \mid B_{\mathbf{m}} > 0]\}$. Therefore, the policymaker strictly prefers the distribution with support

$$\left\{\mathbb{E}[B \mid B_{\mathbf{m}_n^f} < 0], \mathbb{E}[B \mid B_{\mathbf{m}_n^f} > 0]\right\}.$$

Hence, $\mathbf{m}^* = \mathbf{m}_n^f$.

■

G.2 Biased policymaker and uncertain thresholds for citizens

We enrich the baseline model in two ways. First we let the policymaker's threshold be drawn from $c \sim \mathcal{N}(\bar{c}, \tau^2)$, where $\bar{c} \in \mathbb{R}$ is the ex ante bias of the policymaker. Second, we let citizen i's threshold be drawn from $c_i \sim \mathcal{N}(0, \tau_i^2)$, where $\tau_i \geqslant 0$ is arbitrary across i and c_i is independent from c. We derive the players' payoffs in this general environment and argue that the dependence of the payoffs on Σ continues to be qualitatively the same as in Lemma 3.1 in the baseline model.

Proposition G.2 (Dependence of payoffs on informativeness)**.**

(i) The expected payoff of the policymaker is strictly increasing in Σ.

(ii) The expected payoff of any citizen i does not depend on τ_i and it is strictly quasiconvex in Σ, with a minimum at

$$\underline{\Sigma} = \max\left\{0, \frac{1}{2}\left((\bar{B} - \bar{c})\bar{c} - 3\tau^2 + \sqrt{(\bar{B} - \bar{c})^2\bar{c}^2 + 2(2\bar{B} - 3\bar{c})(\bar{B} - \bar{c})\tau^2 + \tau^4}\right)\right\}.$$

Proof. (i) Following steps similar to the proof of Lemma A.1, we observe that

$$\Pr\left[B_{\hat{\mathbf{m}}} - c > 0\right] = \Phi\left(\frac{\bar{B} - \bar{c}}{\sqrt{\tau^2 + \Sigma(\hat{\mathbf{m}})}}\right), \quad \mathbb{E}[B_{\hat{\mathbf{m}}} - c | B_{\hat{\mathbf{m}}} - c > 0] = \bar{B} - \bar{c} + \sqrt{\tau^2 + \Sigma(\hat{\mathbf{m}})}\lambda\left(\frac{\bar{c} - \bar{B}}{\sqrt{\tau^2 + \Sigma(\hat{\mathbf{m}})}}\right)$$

where λ is the inverse Mills ratio. Therefore, taking the product of the two expressions, the expected payoff of the policymaker is (suppressing the dependence on $\hat{\mathbf{m}}$)

$$V_P(\Sigma) = \left(\bar{B} - \bar{c}\right)\Phi\left(\frac{\bar{B} - \bar{c}}{\sqrt{\Sigma + \tau^2}}\right) + \sqrt{\Sigma + \tau^2}\phi\left(\frac{\bar{B} - \bar{c}}{\sqrt{\Sigma + \tau^2}}\right).$$

Differentiating V_P with respect to Σ gives

$$\frac{\partial V_P(\Sigma)}{\partial \Sigma} = \frac{\phi\left(\frac{\bar{B}-\bar{c}}{\sqrt{\tau^2+\Sigma}}\right)}{2\sqrt{\Sigma+\tau^2}} > 0.$$

(ii) Citizen i's expected payoff is

$$\begin{aligned}
V_i(\Sigma(\hat{\mathbf{m}})) &:= \int_{-\infty}^{\infty}\int_{-\infty}^{+\infty} \Pr\left[B_{\hat{\mathbf{m}}} - c \geqslant 0\right] \mathbb{E}\left[B_{\hat{\mathbf{m}}} - c_i | B_{\hat{\mathbf{m}}} - c \geqslant 0\right] \mathrm{d}\Phi\left(\frac{c-\bar{c}}{\tau}\right) \mathrm{d}\Phi\left(\frac{c_i}{\tau_i}\right) \\
&= \bar{V}_C(\Sigma(\hat{\mathbf{m}})) - \left(\int_{-\infty}^{\infty} \Pr\left[B_{\hat{\mathbf{m}}} \geqslant c\right] \mathrm{d}\Phi\left(\frac{c-\bar{c}}{\tau}\right)\right) \int_{-\infty}^{\infty} c_i \,\mathrm{d}\Phi\left(\frac{c_i}{\tau_i}\right) \\
&= \bar{V}_C(\Sigma(\hat{\mathbf{m}})) \\
&= \bar{B}\Phi\left(\frac{\bar{B}-\bar{c}}{\sqrt{\tau^2+\Sigma(\hat{\mathbf{m}})}}\right) + \frac{\Sigma(\hat{\mathbf{m}})}{\sqrt{\Sigma(\hat{\mathbf{m}})+\tau^2}}\phi\left(\frac{\bar{B}-\bar{c}}{\sqrt{\Sigma(\hat{\mathbf{m}})+\tau^2}}\right)
\end{aligned}$$

where $\bar{V}_C$ is the expected payoff of citizen i if all citizens' thresholds are deterministically zero, i.e., $\tau_i = 0$ for all $i \in [0,1]$, and hence it is the same for all citizens. The second equality follows from $\mathbb{E}_{B_{\hat{\mathbf{m}}}}[c_i \mid B_{\hat{\mathbf{m}}} - c \geqslant 0] = c_i$ and the third equality uses $\mathbb{E}[c_i] = 0$. Therefore, the expected payoff of citizen i does not depend on τ_i. The expression for $\bar{V}_C$ follows from a similar reasoning to part (i), using the fact that the probability of adoption is the same but the conditional expectation of $B_{\hat{\mathbf{m}}}$ is

$$\mathbb{E}[B_{\hat{\mathbf{m}}}|B_{\hat{\mathbf{m}}} - c > 0] = \bar{B} + \frac{\Sigma(\hat{\mathbf{m}})}{\sqrt{\tau^2+\Sigma(\hat{\mathbf{m}})}}\lambda\left(\frac{\bar{c}-\bar{B}}{\sqrt{\tau^2+\Sigma(\hat{\mathbf{m}})}}\right).$$

Taking the derivative of $\bar{V}_C(\Sigma)$ with respect to Σ gives

$$\frac{\partial \bar{V}_C(\Sigma)}{\partial \Sigma} = \frac{\phi\left(\frac{\bar{B}}{\sqrt{\tau^2+\Sigma}}\right)}{2\left(\tau^2+\Sigma\right)^{5/2}}\left(\Sigma^2 + 2\tau^4 + 3\tau^2\Sigma + (\bar{c}-\bar{B})(\Sigma\bar{c}+\tau^2\bar{B})\right). \tag{1}$$

Then, $\bar{V}_C$ strictly increases in Σ if and only if $\Sigma^2 + 2\tau^4 + 3\tau^2\Sigma + (\bar{c}-\bar{B})(\Sigma\bar{c}+\tau^2\bar{B}) > 0$. Because $\Sigma \geqslant 0$, the only admissible root of $\Sigma^2 + 2\tau^4 + 3\tau^2\Sigma + (\bar{c}-\bar{B})(\Sigma\bar{c}+\tau^2\bar{B}) = 0$ is

$$\Sigma_0 := \frac{1}{2}\left((\bar{B}-\bar{c})\bar{c} - 3\tau^2 + \sqrt{(\bar{B}-\bar{c})^2\bar{c}^2 + 2(2\bar{B}-3\bar{c})(\bar{B}-\bar{c})\tau^2 + \tau^4}\right),$$

so $\underline{\Sigma} = \max\{0, \Sigma_0\}$. Therefore, the citizen's expected payoff is strictly decreasing at $\Sigma \in [0, \underline{\Sigma})$ and strictly increasing at $\Sigma \in (\underline{\Sigma}, \infty)$. ■

The following corollary establishes that if the policymaker's bias is such that she takes a different decision from what citizens prefer ex ante if no evidence is discovered, then any citizen in any minipublic prefers to be active in order to overturn the policymaker's default decision. Therefore, a necessary condition for a distorted optimal minipublic to arise is for the policymaker and the citizens to prefer the same decision ex ante, i.e., $\bar{B} \leqslant \min\{0, \bar{c}\}$ or $\bar{B} \geqslant \max\{0, \bar{c}\}$.

Corollary G.1. *Fix $\bar{c} \in \mathbb{R}$.*

(i) If the citizens and the policymaker prefer different decisions ex ante, i.e., $\bar{c} < \bar{B} < 0$ or $0 < \bar{B} < \bar{c}$, then $\mathbf{m}^* \in \mathcal{M}_n^f$.

(ii) There exists $\bar{b} > |\bar{c}|$ such that if $|\bar{B}| > \bar{b}$ and $sgn(\bar{B}) = sgn(\bar{c})$, then $\mathbf{m}^* = \emptyset$.

Proof. (i) If $\bar{c} < \bar{B} < 0$ or if $0 < \bar{B} < \bar{c}$, then $(\bar{c} - \bar{B})(\Sigma\bar{c} + \tau^2\bar{B}) > 0$. Because also $\Sigma^2 + 2\tau^4 + 3\tau^2\Sigma \geqslant 0$, we have that $\partial V_i(\Sigma)/\partial\Sigma > 0$ in equation (1). Hence V_i strictly increases in Σ for any i. This means that in any $\mathbf{m}$, each citizen $i \in \mathbf{m}$ strictly prefer being active to being passive. Therefore, any $\mathbf{m}_n^f \in \mathcal{M}_n^f$ is feasible so $\mathbf{m}^* \in \mathcal{M}_n^f$.
(ii) Without loss, let $\bar{B} > 0$ and $\bar{c} > 0$. Then, for $\bar{B}$ sufficiently high, $\partial V_i(\Sigma)/\partial\Sigma < 0$ in equation (1) for any $\Sigma \in [0, \sigma^2]$. Since citizens' expected payoff is strictly decreasing in informativeness, no minipublic can be incentivized to be active. ■

Suppose $\tau = 0$ and $\bar{c} > 0$, so there is no political uncertainty and the policymaker follows a more demanding threshold on the adoption decision. The citizen's expected payoff is strictly decreasing for low levels of informativeness if and only if $\underline{\Sigma} = \bar{c}(\bar{B} - \bar{c}) > 0$, i.e., if and only if the players are in ex ante agreement about their preferred adoption decision and the citizens lean more strongly toward it. If $\bar{B} \gg \bar{c} > 0$ or $\bar{B} \ll \bar{c} < 0$, then $\underline{\Sigma}$ is sufficiently high and the curse of too little information arises even in the absence of any political uncertainty.

G.3 Private interest

This appendix considers a variation of the model in Section 4.2.2 in which citizen i obtains $\beta(i)$ if the policy is adopted (instead of the policy value B) and 0 otherwise. The rest of the structure is the same as in the model of Section 4.2.2. Proposition G.3 shows that a citizen's expected payoff from a minipublic depends on two sufficient statistics: (i) its minipublic informativeness, and (ii) the covariance induced between the citizen's local evidence and the post-minipublic value.

Proposition G.3. *Consider an active minipublic $\mathbf{m} = \{i_1, \ldots, i_n\} \in \mathcal{M}_n$. The expected payoff of any citizen $i \in [0,1]$ from minipublic $\mathbf{m}$ is*

$$V_i(\mathbf{m}) = \bar{B}\Phi\left(\frac{\bar{B}}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}}\right) + \frac{\sigma_{ou}(i, \mathbf{m})}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}}\phi\left(\frac{\bar{B}}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}}\right) =: \tilde{V}_C(\sigma_{ou}(i, \mathbf{m}), \Sigma_{ou}(\mathbf{m})),$$

where $\Sigma_{ou}(\mathbf{m})$ is the minipublic informativeness of $\mathbf{m}$ as derived in Lemma B.1 and

$$\sigma_{ou}(i,\mathbf{m}) := cov(\beta(i), B_{\mathbf{m}}) = \begin{cases} \sqrt{\Sigma_{ou}(i)} & \textit{if} \quad i \in \mathbf{m} \\ \sum_{j=1}^{n} \gamma_j(\mathbf{m}) e^{-|i-i_j|/\ell} & \textit{if} \quad i \notin \mathbf{m}. \end{cases}$$

Proof. Fix a post-minipublic value $B_{\mathbf{m}}$. Observing that the joint distribution of $\beta(i)$ and $B_{\mathbf{m}}$ is Gaussian, the interim payoff of citizen i is

$$\begin{aligned} v_i(B_{\mathbf{m}}) &= \mathbb{E}[\beta(i) \mid B_{\mathbf{m}}] \Pr(c \leqslant B_{\mathbf{m}}) \\ &= \left(\bar{B} + \frac{\sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} (B_{\mathbf{m}} - \bar{B}) \right) \Phi\left(\frac{B_{\mathbf{m}}}{\tau} \right) \\ &= \frac{\Sigma_{ou}(\mathbf{m}) - \sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} \bar{B} \Phi\left(\frac{B_{\mathbf{m}}}{\tau} \right) + \frac{\sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} B_{\mathbf{m}} \Phi\left(\frac{B_{\mathbf{m}}}{\tau} \right) \end{aligned}$$

Integrating with respect to the distribution of $B_{\mathbf{m}} \sim \mathcal{N}(\bar{B}, \Sigma_{ou}(\mathbf{m}))$, we obtain the expected payoff

$$\begin{aligned} V_i(\mathbf{m}) &= \frac{\Sigma_{ou}(\mathbf{m}) - \sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} \bar{B} \int_{-\infty}^{\infty} \Phi\left(\frac{B_{\mathbf{m}}}{\tau} \right) \frac{1}{\sqrt{\Sigma_{ou}(\mathbf{m})}} \phi\left(\frac{B_{\mathbf{m}} - \bar{B}}{\sqrt{\Sigma_{ou}(\mathbf{m})}} \right) \mathrm{d}B_{\mathbf{m}} + \frac{\sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} V_C(\Sigma_{ou}(\mathbf{m})) \\ &= \frac{\Sigma_{ou}(\mathbf{m}) - \sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} \bar{B} \Phi\left(\frac{\bar{B}}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}} \right) + \frac{\sigma_{ou}(i,\mathbf{m})}{\Sigma_{ou}(\mathbf{m})} V_C(\Sigma_{ou}(\mathbf{m})) \\ &= \bar{B} \Phi\left(\frac{\bar{B}}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}} \right) + \frac{\sigma_{ou}(i,\mathbf{m})}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}} \phi\left(\frac{\bar{B}}{\sqrt{\tau^2 + \Sigma_{ou}(\mathbf{m})}} \right), \end{aligned}$$

where V_C is the citizen's expected payoff from our baseline model of common interest. The first line uses the fact that $V_C(\Sigma_{ou}(\mathbf{m})) = \mathbb{E}_{B_{\mathbf{m}}}[B_{\mathbf{m}} \Phi(B_{\mathbf{m}}/\tau)]$, the second line follows from identity $(10,010,8)$ in Owen (1981), and the third line uses the expression for $V_C(\Sigma_{ou}(\mathbf{m}))$. Because $\mathbf{m}$ enters $V_i(\mathbf{m})$ through two sufficient statistics—namely, $\sigma_{ou}(i,\mathbf{m})$ and $\Sigma_{ou}(\mathbf{m})$—we can express it as $\tilde{V}_C(\sigma_{ou}(i,\mathbf{m}), \Sigma_{ou}(\mathbf{m}))$. Finally, note that the payoff characterization thus far holds not only for $\Sigma = \Sigma_{ou}$, but for any Σ that satisfies Assumption 1.

Next, if $i \in \mathbf{m}$, then supposing that he is the j^{th} citizen in it, we have

$$\sigma_{ou}(i,\mathbf{m}) = \mathrm{cov}\left(\beta(i_j), \sum_{k=1}^{n} \gamma_k(\mathbf{m}) \beta(i_k) \right) = \gamma_j(\mathbf{m}) + \sum_{k \neq j} \gamma_k(\mathbf{m}) e^{-|i_j - i_k|/\ell} = \sqrt{\Sigma_{ou}(i_j)}$$

where the last equality follows from calculations in the proof of Lemma B.1. By a similar calculation, if $i \notin \mathbf{m}$, then

$$\sigma_{ou}(i,\mathbf{m}) = \mathrm{cov}\left(\beta(i), \sum_{k=1}^{n} \gamma_k(\mathbf{m}) \beta(i_k) \right) = \sum_{k=1}^{n} \gamma_k(\mathbf{m}) e^{-|i-i_k|/\ell}.$$

■

Note that $\tilde{V}_C(\Sigma_{ou}, \Sigma_{ou}) = V_C(\Sigma_{ou})$. In terms of monotonicity, it is immediate that $\tilde{V}_C$ is strictly increasing in its first argument and, similarly to our baseline analysis, quasiconvex in the second argument. We can now rewrite the (ED) constraints for a citizen $i_j \in \mathbf{m}$ based on the payoff characterization of Proposition G.3:

$$\tilde{V}_C\left(\sqrt{\Sigma_{ou}(i_j)}, \Sigma_{ou}(\mathbf{m})\right) \geqslant \tilde{V}_C\left(\sigma_{ou}(i_j, \mathbf{m}\setminus i_j), \Sigma_{ou}(\mathbf{m}\setminus i_j)\right). \tag{ED}$$

There is a substantial increase in dimensionality of this problem relative to our baseline analysis. The set of (ED) constraints for a minipublic of size n depends on the minipublic through $(3n+1)$ variables (rather than $n+1$ variables under common interest): the active informativeness $\Sigma_{ou}(\mathbf{m})$, n terms of passive informativeness $\{\Sigma_{ou}(\mathbf{m}\setminus i_1), \ldots, \Sigma_{ou}(\mathbf{m}\setminus i_n)\}$, n terms of singleton informativeness $\{\Sigma_{ou}(i_1), \ldots, \Sigma_{ou}(i_n)\}$, as well as n covariance terms $\{\sigma_{ou}(i_1, \mathbf{m}\setminus i_1), \ldots, \sigma_{ou}(i_n, \mathbf{m}\setminus i_n)\}$.

For a singleton minipublic $\mathbf{m} = \{i\}$, $\sigma_{ou}(i, \mathbf{m}) = \sqrt{\Sigma_{ou}(i)}$ and $\sigma_{ou}(i, \emptyset) = 0$. The (ED) constraint simplifies to $\tilde{V}_C\left(\sqrt{\Sigma_{ou}(i)}, \Sigma_{ou}(i)\right) \geqslant \tilde{V}_C(0,0) = V_C(0)$. Because $\Sigma_{ou}(1/2) > \Sigma_{ou}(i)$ for any $i \neq 1/2$, the incentives to discover evidence are strongest for this median citizen. Hence, if $n=1$, the optimal minipublic is either $\mathbf{m}^* = \{1/2\}$ or empty.

For a two-citizen minipublic $\mathbf{m} = \{i_1, i_2\}$, the (ED) constraints for i_1 and i_2 are

$$\tilde{V}_C\left(\sqrt{\Sigma_{ou}(i_1)}, \Sigma_{ou}(\mathbf{m})\right) \geqslant \tilde{V}_C\left(\sqrt{\Sigma_{ou}(i_2)}e^{-(i_2-i_1)/\ell}, \Sigma_{ou}(i_2)\right),$$

$$\tilde{V}_C\left(\sqrt{\Sigma_{ou}(i_2)}, \Sigma_{ou}(\mathbf{m})\right) \geqslant \tilde{V}_C\left(\sqrt{\Sigma_{ou}(i_1)}e^{-(i_2-i_1)/\ell}, \Sigma_{ou}(i_1)\right),$$

respectively, whereas the (ED) constraints from our common interest model can be rewritten as

$$\tilde{V}_C(\Sigma_{ou}(\mathbf{m}), \Sigma_{ou}(\mathbf{m})) \geqslant \tilde{V}_C(\Sigma_{ou}(i_2), \Sigma_{ou}(i_2)), \quad \tilde{V}_C(\Sigma_{ou}(\mathbf{m}), \Sigma_{ou}(\mathbf{m})) \geqslant \tilde{V}_C(\Sigma_{ou}(i_1), \Sigma_{ou}(i_1)).$$

Example 4. This is a numerical example in which the optimal minipublic is the first-best one under private interest but it is a distorted minipublic under common interest. Let $n=2$, $\ell = 1/2$, $\tau = 1$, and $\bar{B} = 1.861$. The first-best minipublic is given by $\mathbf{m}_2^f = \{i_1^f, i_2^f\} = (0.274589, 0.725411)$. This first-best minipublic satisfies the (ED) constraints under private interest, hence the optimal minipublic is exactly $\mathbf{m}_{PI}^* = \mathbf{m}_2^f$. However, it violates the (ED) constraints under common interest. The optimal minipublic under common interest is the distorted minipublic $\mathbf{m}^* = \{0.2778, 0.7222\}$.

Example 5. This is a numerical example in which the optimal minipublic is distorted under private interest but it is the empty minipublic under common interest. Let $n=2$, $\ell = 1/2$, $\tau = 1$, as in Example 4, but now $\bar{B} = 3.02$. The first-best minipublic is not feasible under either private or common interest. Moreover, the prior value $\bar{B}$ is so extreme that the optimal minipublic is $\mathbf{m}^* = \emptyset$ under common interest. However, the optimal minipublic under private interest is $\mathbf{m}_{PI}^* =$

$\{0.285883, 0.714117\}$.

G.4 Delegation of decisional authority

We consider an alternative *delegation game*, that varies from our baseline model in who has decisional authority: at the minipublic choice stage, the policymaker also decides whether to delegate ($d = 1$) decisional authority to the minipublic or retain it ($d = 0$). If $d = 0$, the continuation game coincides with our baseline model. If $d = 1$, then at the adoption stage, a randomly drawn citizen (as opposed to the policymaker) in the minipublic decides whether to adopt the policy.[2] We denote the optimal strategy of the policymaker at the minipublic choice stage as d^* and $\mathbf{m}^*_{del}$.

Proposition G.4. *Let $\mathbf{m}^* = \emptyset$ in the baseline model, and $\mathbf{m}^f_n \in \mathcal{M}^f_n$. Then, in the delegation game,*

1. *if $\tau^2 < \Sigma(\mathbf{m}^f_n)$, then $d^* = 1$ and $\mathbf{m}^*_{del} = \mathbf{m}^f_n$. The policymaker is strictly better off than in the baseline model.*

2. *if $\tau^2 > \Sigma(\mathbf{m}^f_n)$, then $d^* = 0$ and $\mathbf{m}^*_{del} = \emptyset$. The policymaker has the same payoff as in the baseline model.*

Proof. By the premise, $\mathbf{m}^* = \emptyset$ in the baseline model and $\Sigma(\emptyset) = 0$. Hence, the policymaker's payoff if the decision is not delegated is $V_P(0) = \Pr[c < \bar{B}]\mathbb{E}\left[\bar{B} - c | c < \bar{B}\right] = \bar{B}\Phi\left(\bar{B}/\tau\right) + \tau\phi\left(\bar{B}/\tau\right)$. If the policymaker delegates the decision to a minipublic $\mathbf{m}$, then all citizens in $\mathbf{m}$ are active. Then, the policy gets adopted if and only if $B_{\mathbf{m}} \geqslant 0$, so the policymaker's payoff is

$$V_P^{del}(\Sigma(\mathbf{m})) = \Pr\left[B_{\mathbf{m}} \geqslant 0\right]\mathbb{E}\left[B_{\mathbf{m}} - c | B_{\mathbf{m}} \geqslant 0\right] = \bar{B}\Phi\left(\frac{\bar{B}}{\sqrt{\Sigma(\mathbf{m})}}\right) + \sqrt{\Sigma(\mathbf{m})}\phi\left(\frac{\bar{B}}{\sqrt{\Sigma(\mathbf{m})}}\right).$$

By the same argument as in Section G.2, the policymaker's payoff does not depend on τ since $\mathbb{E}[c \mid B_{\mathbf{m}} \geqslant 0] = 0$.

The policymaker's payoff V_P^{del} is strictly increasing in $\Sigma(\mathbf{m})$. Therefore, if $d^* = 1$, then $\mathbf{m}^*_{del} \in \mathcal{M}^f_n$. Finally, we observe that $V_P(0) > V_P^{del}(\Sigma(\mathbf{m}^f_n))$ if and only if $\tau^2 > \Sigma(\mathbf{m}^f_n)$. ■

G.5 No commitment in evidence disclosure

The game of Section 2, which the discussion below refers to as the *commitment game*, assumes commitment in evidence disclosure: the outcome of each active citizen is disclosed publicly regardless of its realization. The citizen cannot withhold unfavorable outcome realizations. We examine here

[2] All citizens are perfectly aligned on which adoption decision they prefer for any post-minipublic value. The assumption of a randomly citizen having decisional authority is for concreteness.

the robustness of our analysis to this commitment assumption. To do so, we consider the following *no-commitment game* which differs from the commitment game only at the evidence discovery stage: (i) each minipublic citizen simultaneously decides whether to discover evidence,[3] (ii) each citizen who discovers evidence observes his outcome privately, and (iii) citizens decide simultaneously whether to disclose or conceal their privately observed outcomes. That is, citizens' evidence is verifiable (e.g., as in Milgrom and Roberts (1986)).

Proposition G.5 establishes that for any feasible minipublic in the commitment game, there exists an equilibrium in the no-commitment game in which the policymaker perfectly infers all minipublic outcomes. In particular, this equilibrium guarantees that in the no-commitment game the policymaker can attain at least the same level of informativeness as that of the optimal minipublic in the commitment game.

Assumption 3. *For any* $\mathbf{m}$ *and* $i \in \mathbf{m}$*, the post-minipublic value* $B_{\mathbf{m}}$ *is strictly increasing in* $\beta(i)$*.*

Proposition G.5. *Suppose that Assumption 3 holds. Let* $\mathbf{m}$ *be any feasible minipublic in the commitment game. Then, in the no-commitment game, there exists an equilibrium for minipublic* $\mathbf{m}$ *in which (i) all citizens in* $\mathbf{m}$ *discover evidence, and (ii) the policymaker infers all outcomes* $\beta(\mathbf{m})$ *perfectly.*

Proof. We prove that the following constitutes an equilibrium: (i) each citizen $i \in \mathbf{m}$ discovers evidence, (ii) each citizen $i \in \mathbf{m}$ discloses $\beta(i) \neq x_i$ and conceals $\beta(i) = x_i$, where x_i uniquely solves $\mathbb{E}[B \mid \beta(i) = x_i] = 0$, and (iii) the policymaker adopts the policy if and only if her post-minipublic value is higher than her realized threshold of adoption c.

First, (iii) is a best response for the policymaker. Because there is a single outcome realization $\beta(i) = x_i$ which citizen $i \in \mathbf{m}$ conceals and both disclosure and no disclosure are on the equilibrium path, the policymaker perfectly infers $\beta(\mathbf{m})$ and the post-minipublic value $B_{\mathbf{m}} = \mathbb{E}[B \mid \beta(i), \beta(\mathbf{m} \setminus i)]$. Therefore, she best responds as in the commitment game.

Second, we show that it is a best response for citizen i to disclose $\beta(i)$ if $\beta(i) \neq x_i$ conditional on i having discovered $\beta(i)$ and all other citizens following strategy (ii). Consider first $\beta(i) \neq x_i$. For simplicity of notation, let $\mu := \mathbb{E}[B|\beta(i)]$. The distribution of the post-minipublic value from the perspective of citizen i with evidence $\beta(i)$ is denoted by $B_{\mathbf{m}}|\beta(i)$. Using the law of iterated expectations, we have $\mathbb{E}[B_{\mathbf{m}}|\beta(i)] = \mathbb{E}[\mathbb{E}[B|\beta(\mathbf{m}\setminus i), \beta(i)]|\beta(i)] = \mathbb{E}[B|\beta(i)] = \mu$. Let $\tilde{\Sigma}$ be the variance of $B_{\mathbf{m}}|\beta(i)$, which does not depend on the realization of $\beta(i)$.[4] The random variable

[3] We assume that discovery decisions are observable to the policymaker: she can distinguish between a citizen with no evidence and one who conceals evidence. Yet this assumption is without loss for Proposition G.5. If the decision were instead unobservable, it would be weakly dominant for each $i \in \mathbf{m}$ to discover evidence.

[4] The variance $\tilde{\Sigma}$ is independent of $\beta(i)$ because the joint distribution of B and $\beta(i)$ is Gaussian. The functional form of $\tilde{\Sigma}$ is inconsequential for this proof and therefore omitted.

$B_{\mathbf{m}}|\beta(i)$ is distributed according to $B_{\mathbf{m}}|\beta(i) \sim \mathcal{N}(\mu, \tilde{\Sigma})$. If citizen i discloses $\beta(i)$, the policymaker's post-minipublic value is $B_{\mathbf{m}}$. By standard Gaussian updating, the post-minipublic value is linear in local evidence. Hence, if i conceals $\beta(i)$, the policymaker's post-minipublic value is $\hat{B}_{\mathbf{m}} = B_{\mathbf{m}} - \lambda$ for some $\lambda \in \mathbb{R}$. That is, concealing $\beta(i)$ shifts the policymaker's post-minipublic value either up or down by $|\lambda|$. By similar calculations as in the proof of Lemma A.1, we calculate the expected payoff of citizen i if he discloses or conceals $\beta(i)$. If he discloses $\beta(i)$, he obtains

$$V_C(\beta(i)) := \mathbb{E}[B_{\mathbf{m}}|B_{\mathbf{m}} \geqslant c, \beta(i)] \Pr[B_{\mathbf{m}} \geqslant c|\beta(i)] = \mu\Phi\left(\frac{\mu}{\sqrt{\tau^2+\tilde{\Sigma}}}\right) + \frac{\tilde{\Sigma}}{\sqrt{\tau^2+\tilde{\Sigma}}}\phi\left(\frac{\mu}{\sqrt{\tau^2+\tilde{\Sigma}}}\right)$$

Similarly, if he conceals $\beta(i) \neq x_i$, he obtains

$$\tilde{V}_C(\beta(i)) := \mathbb{E}[B_{\mathbf{m}}|\hat{B}_{\mathbf{m}} \geqslant c, \beta(i)] \Pr\left[\hat{B}_{\mathbf{m}} \geqslant c|\beta(i)\right] = \mu\Phi\left(\frac{\mu-\lambda}{\sqrt{\tau^2+\tilde{\Sigma}}}\right) + \frac{\tilde{\Sigma}}{\sqrt{\tau^2+\tilde{\Sigma}}}\phi\left(\frac{\mu-\lambda}{\sqrt{\tau^2+\tilde{\Sigma}}}\right)$$

The function $f(a) := \mu\Phi(\frac{a}{\sqrt{\tau^2+\tilde{\Sigma}}}) + \frac{\tilde{\Sigma}}{\sqrt{\tau^2+\tilde{\Sigma}}}\phi(\frac{a}{\sqrt{\tau^2+\tilde{\Sigma}}})$ varies in a depending on the sign of μ and the relation between μ and a:

$$\frac{\partial f(a)}{\partial a} = \phi\left(\frac{a}{\sqrt{\tau^2+\tilde{\Sigma}}}\right)\frac{\mu(\tau^2+\tilde{\Sigma}) - a\tilde{\Sigma}}{(\tau^2+\tilde{\Sigma})^{\frac{3}{2}}}\begin{cases} > 0 \text{ if } \mu > 0 \text{ and } a < \mu, \\ < 0 \text{ if } \mu < 0 \text{ and } a > \mu. \end{cases}$$

Next, we show that $V_C(\beta(i)) > \tilde{V}_C(\beta(i))$ for every $\beta(i) \neq x_i$. Let $\beta(i) > x_i$. Then, by the definition of x_i and Assumption 3, $\mu > 0$ and $\lambda > 0$. This means that disclosing evidence in favor of the policy yields a higher payoff than concealing it, as $f(a)$ is increasing in a for these parameters and $\mu - \lambda < \mu$. Similarly, let $\beta(i) < x_i$. In this case, $\mu < 0$ and $\lambda < 0$. Disclosing evidence in favor of the status quo yields a higher payoff than concealing it. If $\beta(i) = x_i$, then $\lambda = 0$. Then, concealing is a weak best response because $V_C(\beta(i)) = \tilde{V}_C(\beta(i))$.

Finally, we show that (i) holds: it is a best response for citizen i to (privately) discover $\beta(i)$ if all other citizens in $\mathbf{m}$ discover their respective outcomes. Because in the continuation equilibrium (ii) and (iii) all minipublic outcomes $\beta(\mathbf{m})$ are perfectly inferred by the policymaker, citizen i discovers $\beta(i)$ if and only if his (ED) in the commitment game holds. By the premise, every $i \in \mathbf{m}$ in the commitment game is active, hence citizen i prefers to discover $\beta(i)$ in the no-commitment game as well. ■

In this equilibrium, each minipublic citizen $i \in \mathbf{m}$ discloses all but a single outcome realization $\beta(i) = x_i$, which is pinned down by $\mathbb{E}[B \mid \beta(i) = x_i] = 0$. This is the unique realization that leaves him indifferent between the policy and the status quo. To see that this is indeed an equilibrium, consider a minipublic of two citizens $\{i, j\}$. If citizen i conceals evidence in favor of the policy $\beta(i) > x_i$, this encourages the policymaker to be more demanding on $\beta(j)$ for adoption because she incorrectly believes that $\beta(i) = x_i$. This has two opposing effects on i's payoff: the expected value of the policy conditional on its being adopted increases, but the probability of such an adoption decreases. The latter effect dominates. Some policies that are preferable to the status quo, given i's favorable evidence, are forgone. Because citizen i's preference is aligned with the policymaker's ex ante, he does not benefit from inducing false pessimism by concealing favorable evidence about the policy. The reasoning is analogous if citizen i holds unfavorable evidence $\beta(i) < x_i$ instead. False optimism from concealing $\beta(i)$ would lead to policy adoption with too high of a probability.

Thus, for any minipublic that is feasible in the commitment game, the policymaker is not worse off if citizens lack commitment in disclosure. However, there might exist minipublics which are not feasible in the commitment game but are informative in the no-commitment game. Therefore, the policymaker attains weakly higher informativeness in the no-commitment game.

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