Do Not Compromise

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Abstract

Complex reform decisions hinge crucially on precise policy-relevant information. Yet, when decision makers care about their reputation, they may be reluctant to collect information for fear of implementing good policies that are bad for future careers. I model the endogenous information acquisition in the delegated reform decision-making, allowing the public to constrain the decision maker’s policy discretion. I show that the public almost ubiquitously benefits from eliminating or penalizing policies that are ex ante plausible. The public finds it optimal to ban the extreme but ex ante noncongruent policy to motivate information acquisition when 1) the decision maker is less likely to be congruent; 2) the appropriate policies are less likely to be extreme; 3) the scale of reform becomes more radical.

Keywords: Delegation, Information Acquisition, Pandering
1 Introduction

Complex reform decisions hinge crucially on precise policy-relevant information. Yet, motivating career-minded decision makers to collect costly information is not easy. Formal theories have recognized that information becomes less valuable to decision makers, if it might recommend actions that negatively impact future careers. For example, Maskin and Tirole (2004) write:

“Accountability provides an incentive for wasteful information acquisition and a disincentive for acquiring information about the optimal decision”

They conclude that technical decisions should be left to unaccountable officials (judicial power). However, as long as political hierarchy exists, decision makers would inevitably cater to others’ opinions for career concerns. For example, the unelected department aides were cued by Dominic Cummings to support the no-deal Brexit regardless of whether this is a good idea\(^1\). Even judges are no exceptions; they may rule creatively or defer to elected officials in order to signal competence or congruence (Levy, 2005; Fox and Stephenson, 2011). To minimize the policy risk associated with reform decisions, we ask: how to cure a decision maker’s distorted incentive to acquire information arising from career concerns?

We build a simple model to study the endogenous information acquisition during delegated reform decision-making. Per Maskin and Tirole (2004), motivating information acquisition is more likely when we remove the experts’ accountability or neutralize their career concerns. To this end, we explore a policy instrument that is well-known in the delegation literature but novel in pandering: constraining the expert’s delegation set. This approach is viable only if there are at least two available reform decisions in addition to the status quo. In the context of reform decision-making, this prerequisite is often reasonable. For example, a reform could be simple or complex in nature (Foarta and Morelli, 2021) and/or large or small in scale (Xie and Xie, 2017).

Model outline. We consider a reform decision environment consisting of three plausible actions: the status quo, a moderate reform, and a large-scale (radical) reform. There is a careerist

\(^1\)“How Dominic Cummings took control in Boris Johnson’s first days as Prime Minister”. BuzzfeedNews. 27 July 2019.
expert whose policy interest is not necessarily aligned with her/his principal. The principal and the aligned expert want the policy to match the underlying state, while the misaligned expert prefers the lowest action possible (status quo). Players suffer quadratic loss if the enacted policy is different from their ideal ones. \textit{A priori}, the principal and the expert are symmetrically uninformed about the state; the principal’s uninformed favorite action is the moderate reform. The expert is tasked with decision-making within the delegation set; he may acquire an informative but costly signal after the principal chooses the delegation set but before he makes the policy. At the end of the game, the principal makes a retention decision that might benefit the expert.

**Main results.** We show that constraining the delegation set indeed strengthens the expert’s incentive to acquire information and make informed decisions. Without constraining the set, the expert tends to pander to the ex ante popular action – the moderate reform. This policy attracts the expert not only because it provides a secured future, but also because it is a good policy compromise to both types: to an aligned agent it minimizes the policy risk; to a misaligned agent it is less expensive than the radical reform.

Now, suppose the principal bans the moderate reform. She definitely suffers if the state calls for it. After the ban, however, the expert is no longer accountable to their policy choices: choosing the right policy matters more than having a better future career. To see this, consider the misaligned expert first. After banning the compromising policy, he finds the policy loss associated with pandering to the radical reform unbearable even assuming this is the only way to secure a good future. On the other hand, the aligned expert has a strong incentive to make informed decisions to avert the huge policy loss arising from mismatching actions with the extreme states. In economics language, banning the moderate policy improves the aligned expert’s (policywise) value of information (see Szalay (2005) and Ball and Gao (2021)). For the similar reason as the misaligned type, the aligned expert is willing to follow a signal pointing to the status quo at the cost of political removal. This ban benefits the principal whenever the benefits from informed decisions outweighs the loss of control from the misaligned experts and the banned action.

Beyond the “no compromise” suggestion from economics, we identify a novel solution pertaining to the pandering context: banning the status quo. To illustrate, let’s anchor an uninformed
expert’s action to the moderate reform. The policy stake that he bears by deviating to the status quo is generically different from deviating to the radical reform. If the latter is larger in magnitude, then banning the status quo makes pandering less likely because it begets a larger policy loss. Consequently, motivating information acquisition becomes more plausible after the ban. Banning the status quo delivers another layer of benefit to the principal: it disciplines the action of the misaligned expert. This insight echoes the wisdom of the spatial delegation literature that the principal should restrict the action of a potentially misaligned agent (Bendor et al., 2001; Bendor and Meirowitz, 2004).

Through comparative static analysis, I show when and how the principal should intervene in the delegated reform decisions. When the expert is accountable, the principal almost ubiquitously benefits from eliminating the ex ante extreme but noncongruent action. Even assuming this policy ban motivates information acquisition, however, it might not be optimal. Banning the compromising policy prevails if the expert 1) is less likely to be congruent; 2) the extreme policies are less likely to be appropriate; 3) the reform decision environment becomes more radical.

**Related Literature.** We build on the intuition of Maskin and Tirole (2004) that motivating information acquisition is easier when an agent is not accountable to her/his actions. To accommodate information acquisition with more than two actions, our modeling device is closer to Fox (2007), Fox and Jordan (2011), and Liu (2021). These models conceptualize a misaligned agent as one who has a state-independent policy preference biased towards a certain direction; and, regardless of her/his policy preference, the agent tries to signal congruence to a principal for retention. In other political contexts, the careerist agent may pander to signal competence (Canes-Wrone et al., 2001; Levy, 2005). The insight that the principal may motivate information acquisition through constraining the agent’s delegation set is borrowed from Szalay (2005) and Ball and Gao (2021). In the pandering context, however, our paper identifies a novel mechanism: eliminating ex ante plausible policy choices reduces the set of actions that might secure an agent’s future career; this increases the policy cost associated with pandering and removes the agent’s accountability.
2 Model

Setup. Consider a one-period model of reform decision-making with three possible actions \(\{0, 1, r\}\). Action 0 stands for the status quo; action 1 stands for a moderate reform, and action \(r > 1\) stands for a radical reform. Call an action \(x\) appropriate if it matches the underlying state \(\omega \in \{0, 1, r\}\).

Each state \(\omega\) occurs with probability \(p_\omega\). Set the distribution of states symmetric around the compromising policy: \(p_0 = p_r = p; p_1 = 1 - 2p\) with \(p \leq \frac{1}{2}\). In doing so, \(p\) measures the likelihood of extreme policies and thus the value of compromise. Call the reform decision environment radicalized if \(r\) increases.

The reform decision involves two players: a policy expert (he) and a principal (she) to whom he is accountable. Per Maskin and Tirole (2004), the expert may be an official and the principal could be an electorate. The principal never observes the state \(\omega\). She permits a set of actions \(D \subseteq \{0, 1, r\}\) for an expert to choose from. While the principal always desires the appropriate policy, the expert may not. Specifically, the expert has a private type \(t \in T = \{c, n\}\) indicating whether he is “congruent”. Following Fox (2007), a congruent expert \((t = c)\) shares the principal’s policy preference. A noncongruent expert \((t = n)\) has the status quo as his state-independent bliss point. We may think of the congruent experts as policy entrepreneurs or “reformists” who wants their policy legacy recognized, and the noncongruent experts as captured bureaucrats or “conservatives” who avert policy changes. The principal’s prior belief is \(P(t = c) = \pi\).

At the end of this period, the principal observes the policy choice \(x\) but not her policy payoff. She then decides whether to retain the expert conditional on her posterior belief about the expert’s congruence. If the principal does not retain, she draws another expert from the same pool.

Information. The expert initially does not observe \(\omega\), but he may learn \(\omega\) perfectly by paying an information acquisition cost \(k > 0\). The activity of information acquisition is unobserved by the principal.

Preferences. The principal and the expert incur quadratic loss if the policy choice differs from their ideal ones: conditional on the state \(\omega\), the principal and the congruent expert have the policy payoff \(v_c = -(x - \omega)^2\). The noncongruent expert’s policy payoff is \(v_n = -x^2\).

The principal has a lexicographic preference for retaining a congruent expert at the end of
this period. This assumption exemplifies the momentum status of reform decision-making in the principal’s calculus. Particularly when the reform opportunity is rare, selecting a congruent subordinate often comes second to carrying out the reform well. We relax this assumption in the supplementary materials.

The office rent together with the delegation set is the principal’s only instrument to holding this expert accountable. Conditional on retention, the expert earns an office rent \( R \). We suppose that the principal would retain the expert whenever indifferent. This simplifying assumption reduces the principal’s strategy to choosing a subset \( D_R \subseteq D \) within which to trigger retention (subject to sequential rationality). While technical, this restriction is not uncommon in the delegation literature (see also Armstrong and Vickers (2010)).

**Sequence of moves.** The game proceeds as follows. Nature draws the state \( \omega \) and the expert’s type \( t \) first. After that, the principal chooses the delegation set \( D \subseteq \{0, 1, r\} \). The expert then decides whether to acquire information. If so, he observes \( \omega \); otherwise, he remains ignorant. After that, the expert makes the reform decision \( x \in D \). The principal observes \( x \) and decides whether to retain the expert. Finally, all players’ payoffs realize and the game ends.

**Assumptions.** We impose three assumptions. First, the office rent \( R \) is moderate. A very large office rent tends to induce the expert to pander to the congruent actions regardless of his private type; a very small office rent does not discipline the expert’s behavior. The formal requirement is \( R \in [1, r^2 - 1) \) with \( r > \sqrt{2} \). Second, the principal and the congruent expert \textit{ex ante} prefer the moderate reform to the radical reform to the status quo. The moderate reform may prevail because it reduces the policy risk associated with reform decision-making; the radical reform would be better than the status quo whenever it is less risky than the status quo. Together, we require \( \sqrt{2} < r \leq 2 \). Third, to vary the expert’s incentive to acquire information across different delegation environments, we assume that the information cost \( k \) is moderate; its exact restriction is specified later.

**Solution concept.** The solution concept is Perfect Bayesian Equilibrium (PBE). As is common in communication games, this game admits numerous equilibria. We focus on the principal-optimal equilibria that survive the D1 refinement. We henceforth call this sort of PBE an “equilibrium”; the
exact definition of PBE and refinement is deferred to the Appendix. An equilibrium is informative if at least one type of expert acquires and uses information on the equilibrium path.

3 Equilibrium analysis

We solve the game backwards. Given a delegation set, we ask whether the careerist expert would make informed policy choices. We then find the principal’s optimal delegation set taking account of whether it motivates the expert’s information acquisition.

3.1 Preliminary

We address the first puzzle: who might acquire information?

After inspecting the payoff structure, one concludes that the congruent expert is more motivated to acquire information. The rationale is straightforward: putting aside career concerns, the congruent expert always benefits from learning more about the state. By contrast, the noncongruent expert already knows his preference, so the policy value of information is zero. Thus, all equilibria of this game must share a common structure: the congruent expert must acquire information whenever the noncongruent type does so.

In fact, we can sharpen this intuition with the following two lemmas.

Lemma 1. In any equilibrium, the noncongruent expert would not acquire information.

Per earlier discussion, we establish this lemma by exclusively focusing on the retention value of information for a noncongruent expert. Note that the (unobserved) activity of information acquisition has nothing to do with the principal’s retention decision; she updates positively from a particular action whenever it is more likely to be carried out by the congruent expert. This observation alludes that an uninformed expert can do equally well in retention as an informed expert: he simply computes the informed expert’s distribution of actions, and randomizes over these actions with the same probabilities. Consequently, the activity of information acquisition is redundant for the noncongruent expert.
Lemma 2. In any informative equilibrium, on path the noncongruent expert will be removed with probability 1; he chooses the lowest action in the delegation set. The principal retains on other actions.

According to this lemma, holding the congruent expert accountable (acquiring information) comes at a price of losing control over a noncongruent one.

The rationale of this lemma concerns the relative frequencies of actions between the informed and uninformed experts. Generically, a noncongruent would not be indifferent between pandering for retention and choosing the ideal policy at the cost of political removal. So towards contradiction let’s suppose the noncongruent expert shall be retained on path. He will surely choose the lowest action in $D_R$ to glean the maximum policy payoff. But the congruent expert would take this action strictly less often – to utilize information, he must also choose other actions on path. From the eye of the principal, the lowest action becomes bad news for congruence, contradicting that it falls inside $D_R$.

Lemma 1-2 establish a sort of inefficiency result for this delegation game with reputation concerns. It identifies the fundamental limitation in the principal’s use of delegation to control the expert – even assuming that career concerns are at work, at least one type of the expert would fail to choose the ex post optimal action with strict positive probabilities.

Below, we examine whether and how the principal might cleverly select the delegation set to minimize the loss of control. As a benchmark, we first consider the expert’s strategy when the principal offers the “full menu” $D = \{0, 1, r\}$. We then turn to two constraining policies. Call the delegation set “no compromise” if $D = \{0, r\}$, and “change” if $D = \{1, r\}$.

3.2 Full menu

In the absence of career concerns, full menu assigns the largest value of information for the congruent expert. But careerist experts are constrained to make informed decisions. For fear of political removal, they shy away from the ex post correct albeit noncongruent actions. Since the value of information has been compromised, both types of the expert may pool at the ex ante popular actions to secure office without acquiring information.
Below we aim to establish an equilibrium involving the following strategy: the expert chooses the moderate reform without acquiring information. The principal retains whenever observing a reform, be it moderate or radical.

The noncongruent expert never deviates to acquiring information. His only plausible deviation comes from choosing the status quo at the cost of removal, which under the assumption $R > 1$ is unprofitable. The congruent expert’s only deviation comes from acquiring information, and deviating to the radical reform when the state calls for it. This deviation is not profitable if $k > p(r - 1)^2$, where the RHS stands for the value of information.

Next we rule out any equilibrium with information acquisition. By Lemma 1-2, in any informative equilibrium the noncongruent expert must choose the status quo and shall be removed at the end of this period. But he can profitably deviate by choosing the moderate reform and securing office. Hence,

**Proposition 1.** *Under the full menu and assuming $k > p(1 - r)^2$, there is a pooling equilibrium surviving the divinity refinement. In this equilibrium, both types of expert pool on the ex ante popular action “moderate reform”. The principal always retains the expert.*

**Summary.** Career concerns do two jobs. On the one hand, it reduces the value of information for a congruent expert, thus rendering the political compromise “moderate reform” focal in the policy-making. On the other hand, they discipline the noncongruent expert by forcing him to pander to the ex ante congruent action. The value of delegation is zero – the principal may achieve the same outcome by choosing the moderate reform herself.

### 3.3 Constraining to motivate

The rationale for constraining the delegation set must come from motivating information acquisition; otherwise, there is nothing that the principal can improve from an ex ante optimal policy choice. Below we examine the possibility of an informative equilibrium. Indeed, whenever the expert plays an informative strategy within the constrained delegation set, he must prepare for political removal when the state calls for the relatively noncongruent action. This strategy is rational only if the policy stakes overwhelm career concerns, which is plausible when the alternative
policy is really bad.

No compromise.

Suppose the principal bans the ex ante popular action “moderate reform”. Two effects follow. According to the well-known results (Szalay (2005), Ball and Gao (2021)), banning the moderate reform encourages the expert to acquire information because the remaining policies are extreme and risky. The more refreshing effect has to do with the disciplinary power of career concerns: banning the moderate reform makes it costlier for the expert to pander to the congruent actions.

With the help of Lemma 1 and 2, we conjecture an equilibrium of the following form: the congruent expert acquires information and acts appropriately unless the state calls for a moderate reform; the noncongruent always chooses the status quo. The principal retains upon observing the radical reform and replaces otherwise.

To see why this might constitute an equilibrium, note first that the noncongruent expert and the congruent expert observing the state $\omega = 0$ have a dominant strategy to stay with the status quo. The congruent expert having observing the state $r$ has no reason to deviate. Since the noncongruent expert chooses the status quo more often, it must lead to political removal.

Suppose the congruent expert deviates by not acquiring information. He will choose the radical reform not only because it is politically safe, but also because this is his optimal policy left on the table. An informed congruent expert chooses the radical reform upon observing $\omega = 1$ because $R > r(r - 2)$. Then this deviation cannot be profitable if

$$-pr^2 - (1 - 2p)(r - 1)^2 + R \leq -k - (1 - 2p)(r - 1)^2 + (1 - p)R$$

The condition simplifies to $k \leq p(r^2 - R)$. Here $p(r^2 - R)$ is the value of information, which is relevant when the state calls for the status quo. If the expected policy gain net of career concerns compensates for the information cost, the congruent expert would not deviate.

**Proposition 2.** Under no compromise and assuming $k \leq p(r^2 - R)$, there is an informative equilibrium. In this equilibrium, the noncongruent expert chooses the status quo without acquiring information. The congruent expert acquires information. He chooses the appropriate action unless
the state calls for the moderate reform, in which case he chooses the radical reform. The principal
retains upon observing the radical reform and replaces otherwise.

Summary. Banning the compromising action tilts the expert’s pandering incentive. For experts whose ideal policy is the status quo, acting congruently to secure office costs $r^2$; it is 1 under full menu. This means that career concerns lose its disciplinary power over the expert. It nonetheless may benefit the principal, though. The congruent experts are encouraged to act informatively except when the state calling for the banned action. Hence, the principal may prefer the “no compromise” delegation set over the full menu, as long as 1) there are plentiful congruent expert and 2) the moderate state does not happen often.

Change.

Suppose the principal bans the status quo and pushes for a political reform even it might be ex post inappropriate. At first glance, this delegation strategy is unlikely to benefit the principal. It simply rules out an action that the expert would never take for fear of political removal. If no expert acquires information under full menu, they will continue to do so under the status quo ban.

But principal can make a difference by promising to retain only upon observing the radical reform. Similar as the no compromising delegation strategy, banning the status quo also tilts the expert’s cost of pandering. To illustrate, let’s anchor the expert’s action to the moderate reform and suppose that any deviation bears career concerns. Under full menu, the cheapest policy deviation is the status quo, which cost 1. Under change, the only deviation is the radical reform, which cost $r^2 - 1$. As long as $r > \sqrt{2}$, the cost of pandering no longer stays the same.

The existence of an informative equilibrium depends on whether the principal’s promise to replace upon observing the moderate reform is credible. Indeed, Lemma 1-2 guarantee it. In any informative equilibrium, the noncongruent expert must initiate the moderate reform strictly more often than the informed congruent expert. This suggests that the moderate (radical) reform is bad (good) news for retention.

Below we aim to construct an equilibrium of the following form: the congruent expert acquires information and chooses the appropriate action unless the state calls for the status quo, in which
case he chooses the moderate reform. The noncongruent expert does not acquire information and choose the moderate reform. The principal retains upon observing the radical reform and removes upon observing the moderate reform.

The noncongruent has no incentive to deviate from this strategy. Once the congruent expert has acquired information, he shall choose the appropriate actions whenever $R \leq r^2 - 1$. The remaining deviation possibility concerns the congruent expert refraining from acquiring information and choosing the moderate or radical reform. The former strategy brings him a payoff of $-p_0 - pr(r - 1)^2$; the latter brings $R - p_0 r^2 - p_1(r - 1)^2$. This deviation is unprofitable if the expected payoff of acquiring information is higher. The necessary and sufficient condition is

$$-k - p_0 + p_r R \geq \max\{-p_0 - p_r(r - 1)^2, R - p_0 r^2 - p_1(r - 1)^2\}$$

It simplifies to $k \leq k_r := \min\{p(R + (r - 1)^2), p[(r^2 - 1) - R] + (1 - 2p)(r - 1)^2 - R\}$.

**Proposition 3.** Under the change assumption, there is an informative equilibrium provided that $k \leq k_r$. In this equilibrium, the noncongruent expert chooses the moderate reform without acquiring information. The congruent expert acquires information. He acts appropriately unless the state calls for the status quo, in which case he chooses the moderate reform. The principal retains upon observing the radical reform and replaces otherwise.

**Summary.** Banning the status quo also encourages information acquisition by reducing the expert’s accountability. It has another layer of benefit to the principal by disciplining the action of a noncongruent expert. In other words, banning the status quo aligns the ex ante preferences between the principal and the expert. This means that regardless of whether the parameter values supporting an informative equilibrium exists, the principal cannot do worse than the full menu case.

### 4 Mechanism Design

Maskin and Tirole (2004) recognize that accountability might create perverse incentives for policy-making. One remedy is making the careerist expert unaccountable to their actions. In our model,
constraining the delegation set would do this job by raising the cost of pandering. The principal may benefit from this if the policy gain from the better-motivated congruent expert dominates the loss of control over the noncongruent expert. Below we compute the principal’s expected payoff under three delegation strategies.

4.1 Comparison of delegation strategies.

**Full menu.** Under full menu, the principal’s payoff is the expected loss from choosing the moderate reform.

\[ V^F = -p - p(r - 1)^2 \]

**No compromise.** Under no compromise, the principal’s incurs a loss from losing control over a noncongruent expert who stays with the status quo no matter what. If she meets a congruent expert who would acquire information on path, she incurs a policy loss only when the state calls for a moderate reform but the expert goes radical. Her payoff is

\[ V^B = \pi[(-(1 - 2p)(r - 1)^2)] + (1 - \pi)[(-(1 - 2p) - pr^2)] \]

**Change.** Under Change, there are two cases. If the expert is still accountable, the principal would obtain the same payoff from an uninformed equilibrium as if she offers full menu. If banning the status quo makes the expert unaccountable, the principal improves her payoff because she avoids the loss when the state calls for a radical reform. Her expected payoff is

\[ V^C = -p - (1 - \pi)p(r - 1)^2. \]

Here \( p \) is the loss that she must incur when the status quo is called but banned. \( (1 - \pi)p(r - 1)^2 \) is the loss from an unaccountable noncongruent expert.
4.2 Optimal delegation

Let us consider the optimal delegation strategy from the principal’s perspective. We have to caution that the parameter restrictions supporting the equilibrium behaviors under each delegation strategy might not be compatible. Were this true, the principal no longer faces a “design” problem; she will simply choose the only feasible delegation strategy permitted by the parameters.

The lemma below establishes that the principal’s delegation problem is real. Fix \((p, \pi)\) and denote set of parameters \((r, R, k)\) supporting equilibrium behaviors described above as \(\Omega\).

**Lemma 3.** \(\Omega\) is nonempty.

We now turn to the principal’s optimal delegation. A crucial observation is that, the principal-optimal delegation must be one of the cases aforementioned. Banning more than one action cannot be optimal— in doing so, the principal allows for uninformed actions only; she can do no worse by offering the full menu. Banning the radical reform cannot be optimal – it does not affect the expert’s pandering incentive because the policy cost of the cheapest deviation stays the same.

**Proposition 4.** The principal always benefits from banning the status quo relative to the full menu. For parameters within \(\Omega\), the principal’s optimal delegation strategy is banning the compromising policy iff 1) the expert is more likely to be congruent; 2) the extreme policies are more likely; 3) the reform decision becomes less radical.

Below is the intuition. When there are more congruent experts in the pool, the loss of control from delegation become less problematic. When the extreme policies are more likely, failing to implement the compromising policy does less harm than failing to implement the (more likely) status quo. The principal suffers more if the noncongruent expert implements the status quo relative to the moderate reform when the state calls for the radical reform.

5 Conclusion

In this paper, we study the endogenous information acquisition problem during delegated reform decision-making. Building on the insights from delegation and information economics, we identify
constraining the delegation as a viable means to motivate an agent to collect information. Per Maskin and Tirole (2004), this strategy might achieve its goal only if it cures the agent’s distorted policy-making incentive by career concerns. To this end, the optimal constraining strategy does not have to be excluding the compromising policies (as Szalay (2005) and Ball and Gao (2021) suggest). Excluding the ex ante noncongruent action might help even more, because it also disciplines the policy-making of a misaligned agent.

Appendix

Solution concept and refinement

Fix some delegation set $D$ with its typical action being $d$. Let $\tau \in \{0, 1\}$ indicate whether the expert has acquired information ($\tau = 1$) or not ($\tau = 0$). Then an expert’s information acquisition strategy is a function of his type $t \in \{c, n\}$. Denote it as $\tau_t$. An uninformed expert’s strategy is a distribution over the actions permitted in the delegation set $D$ conditional on his type $t$. Each action $d$ is chosen with probability $q_{d}(t)$. An informed expert’s strategy maps from type and signals to a distribution over the actions permitted in the delegation set $D$. Conditional on the signal realization $\omega$, each action $d$ is chosen with probability $p_{d}(\omega, t)$.

Now we specify the principal’s belief by the Bayes rule whenever possible. Along the path, suppose she observes the action $d$. This action is taken by a type-$t$ expert with probability $A_{d}(t) := \tau_{t}q_{d}(t) + (1 - \tau_{t})\sum_{\omega}p_{\omega}p_{d}(\omega, t)$. Hence, the posterior belief that the expert is congruent upon the action $d$ is

$$
\mu_{d} := P(t = c|x = d) = \frac{\pi A_{d}(c)}{\pi A_{d}(c) + (1 - \pi)A_{d}(n)}
$$

The principal’s strategy maps from the posterior belief $\mu_{d}$ to a binary decision “retention” ($y = 1$) or “removal” ($y = 0$). An action $d$ is good (bad) news for retention if $\mu_{d} \geq \pi$ ($\mu_{d} < \pi$).

Now we define a Perfect Bayesian Equilibrium. It is characterized by measurable $\tau_{t}$, $q_{d}(t)$, $p_{d}(\omega, t)$, and $y(\mu_{d})$, such that:
1. If \( d \in D \) is in the support of \( A_d \), where \( A_d := \pi A_d(c) + (1 - \pi) A_d(n) \), then

\[
d \in \arg \max_{x \in D} \sum_{\omega} p_{\omega} v_t(x, \omega) + R_y(\mu_d)
\]

if \( \tau_t = 0 \), and

\[
d \in \arg \max_{x \in D} v_t(x, \omega) + R_y(\mu_d)
\]

if \( \tau_t = 1 \).

2. \( y(\mu_d) = 1\{\mu_d \geq \pi\} \);

3. Let \( V_t(0) := \max_{x \in D} \sum_{\omega} p_{\omega} v_t(x, \omega) + R_y(\mu_d) \) and \( V_t(1) := \sum_{\omega} p_{\omega} \max_{x \in D} v_t(x, \omega) + R_y(\mu_d) \) be a type-\( t \) expert’s expected continuation payoff after the information acquisition decision. Then \( \tau_t = 1 \Leftrightarrow k \leq V_t(1) - V_t(0) \).

4. The belief \( \mu_d \) is pinned down by the Bayes rule whenever possible.

The divinity refinement proposed by Banks and Sobel (1987) places additional restrictions on the principal’s off-path belief. We follow the treatment of Fudenberg and Tirole (1991). Suppose an action \( d' \) is off-path. Let \( P(\mu_{d'}, T, t) := E[y(\mu_{d'})], T, t \) be the principal’s mixed strategy best reply to \( d' \) (retention probability) with beliefs concentrated on \( T \) that makes type \( t \) strictly prefers \( d' \) to his equilibrium strategy. If \( P(\mu_{d'}, T, c) > P(\mu_{d'}, T, n) \), then \( d' \) is more likely to be carried out by a noncongruent expert because the congruent one needs more retention compensation to benefit from this action. A sufficient condition is that the congruent expert’s policy gain from deviating to \( d' \) must be smaller than the noncongruent expert. In this case, the divinity refinement assigns probability 1 that the action \( d' \) comes from the noncongruent agent.

We will use this refinement in the equilibrium construction.

**Proof of Lemma 1**

*Proof.* Fix some delegation set \( D \) with its typical action being \( d \). An informed strategy maps each state \( \omega \) into the probability distribution over actions, with each action \( d \) played with prob-
ability $p_d(\omega)$. Consider an uninformed strategy with each action $d$ being played with probability $\sum_\omega p_\omega p_d(\omega)$. This strategy achieves the same expected policy payoff for the noncongruent agent as the informed one. Since the principal does not observe $\omega$ before retention, these two strategies induce the same posterior beliefs $\mu_d$. Hence, the noncongruent agent never acquires information.

**Proof of Lemma 2**

*Proof.* Now that the congruent expert has acquired information at a positive cost $k > 0$, he must play an informative strategy on path; otherwise, sequential rationality is violated. Let $W$ be the set of all actions that the informed congruent expert may play with positive probabilities. Since he does not play uninformative strategy, $|W| \geq 2$. Recall $D_R$ as the set of actions that the principal would retain upon seeing. Since the principal retains whenever indifferent, $D_R \neq \emptyset$.

Now we aim to establish a contradiction. The noncongruent expert must choose $\min D_R$ with probability 1, because doing so would secure him the office and bring the best policy payoff. But the congruent cannot play $\min D_R$ with probability 1 because $|W| \geq 2$. This renders $\min D_R$ bad news for retention. Contradiction.

**Proof of Proposition 1**

*Proof.* We show that these strategies indeed constitute part of an equilibrium with the following beliefs: the principal believes that the expert is congruent with probability $\pi$ on path. Off the path, she believes that the expert is congruent with probability 1 upon observing $x = r$ and 0 upon observing $x = q$.

To see why the divinity condition assigns such a belief, consider who benefits more from a deviation to the status quo in terms of policy. The policy gain to a noncongruent expert is 1 following this deviation; it is strictly less than 1 to a congruent expert, either because he is uninformed or because he needs to acquire a cost. Per the discussion of equilibrium refinement, the principal believes that the expert is noncongruent (congruent) whenever observing an action lower (noncongruent) than the moderate reform.

Reiterating this criterion, we can verify that the moderate reform is the only possibility for a
pooling equilibrium. An uninformed expert has no profitable deviation. The condition to rule out a congruent expert’s deviation to acquire information is \( k \geq p_r (r - 1)^2 \).

There does not exist a separating equilibrium without information acquisition. Suppose there is one. In this equilibrium the noncongruent expert must be removed with probability 1 so he will choose the status quo. This means that the principal cannot retain upon observing \( x = 1 \), for otherwise the noncongruent would have deviated. Hence, the congruent expert must have chosen the radical reform. But then by the divinity criterion the principal’s off-path believe upon observing the action \( x = 1 \) is congruent, contradiction.

5.1 Proof of Proposition 2

Proof. We first show that these strategies indeed constitute part of a separating equilibrium. An informed congruent expert receives a payoff \(-1\) by choosing the status quo; he receives \( R - (r - 1)^2 \) by choosing the radical reform. Hence, the cutoff value for the office rent \( R \) is \( r(r - 2) \). Conditional on their information acquisition decisions, no experts would deviate to other policies from the equilibrium strategies. Furthermore, under the assumption \( k \leq p_0 (r^2 - R) \), the congruent expert cannot deviate by not acquiring information and act uninformatively.

Next we rule out other equilibrium possibilities. Since the noncongruent agent must choose the status quo, there cannot be a pooling equilibrium because the congruent agent strictly prefers the radical reform— it induces a better policy outcome while securing offices. There cannot be a separating equilibrium in which the congruent expert does not acquire information and chooses the radical reform. For reasons in the main text, the value of information outweighs the information cost.

Proof of Proposition 3

Proof. We remark first that the equilibrium is not unique under the divinity refinement. Under the assumption that \( k \leq k_r \), information acquisition is valuable. Since \( R \leq r^2 - 1 \), the congruent agent observing the state 0 will choose the moderate reform—he has a payoff of \(-1\) by initiating a moderate reform, and \( R - r^2 \) if he initiates a radical reform. He would match the action with the
Proof of Lemma 3

Proof. Set \( R = 1, k = p(r - 1)^2 + \epsilon \) where \( \epsilon > 0 \) is infinitesimal, and \( r \geq \max\{ \frac{3}{2}, r \} \) where \( r(p) := \frac{1 - 3p + \sqrt{1 - 3p + 3p^2}}{1 - 2p} \). It can be shown that \( r(p) \) is decreasing in \( p \) with \( r(0) = 2 \) and \( r(\frac{1}{2}) = \frac{3}{2} \).

Proof of Proposition 4

Proof. Since \( r \leq 2 \), under the no compromising policy the expert observing \( \omega = 1 \) chooses the radical reform, rendering the principal a payoff of \(-\pi[(1 - 2p)(r - 1)^2] - (1 - \pi)[(1 - 2p + pr^2)]\). Let \( \Delta(p, r, \pi) := \pi(1 - 2p)(r - 1)^2 + (1 - \pi)(1 - 3p + 2pr) - p \) be the net loss of banning the moderate reform relative to banning the status quo. \( \frac{\partial \Delta}{\partial \pi} = (1 - 2p)(r - 1)^2 - (1 - 3p + 2pr) < 0 \).

Both of \( \Delta(p, r, 1) \) and \( \Delta(p, r, 0) \) are decreasing in \( p \) and increasing in \( r \), so must be \( \Delta(p, r, \pi) \).

It remains to show that \( \Delta(p, r, \pi) \) has zeroes under the parameter restriction \( \Omega \). Choose the parameters as in the proof of Lemma 3. \( \Delta(p, r, 1) = 0 \iff r \geq r_1(p) = 1 + \frac{p}{1 - 2p} \). For \( p \in [0, \frac{1}{2}] \), \( r_1 \) is increasing from 1 to \(+\infty\); \( r \) is decreasing in \( p \) from 2 to \( \frac{3}{2} \). Hence \( r_1 \) and \( r \) must intersect in a way that \( \Delta(p, r, 1) \) change signs for some \( r' \in (r(p), 2) \). Similarly, \( \Delta(p, r, 0) = 0 \iff r \geq r_0(p) = 2 - \frac{1}{2p} \), which is increasing from \(-\infty\) to 2 for \( p \in [0, \frac{1}{2}] \); \( r_0 \) and \( r \) must intersect in a way that \( \Delta(p, r, 0) \) change signs for some \( r'' \in (r(p), 2] \). By its continuity in \( \pi \), \( \Delta(p, r, \pi) \) has zero within \( \Omega \).

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