Political Agency, Oversight, and Bias: The Instrumental Value of Politicized Policymaking

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Abstract

We develop a theory of policymaking between a principal, an agent, and an overseer. The agent increases the overall quality of policy outcomes through costly effort investments. Oversight impacts agent effort incentives, but only if the policy bias of the agent does as well. The principal chooses whether or not to authorize the agent to make policy on her behalf in light of oversight dynamics. We show that anytime oversight is not an effective means of political control, the principal never benefits from a biased agent relative to an ally. When oversight is effective, the principal almost always benefits from agent bias. Based on the dynamics of policymaking oversight the ally principle fails for instrumental reasons. The principal benefits from trading off agent bias in the substance of policy for reduced slack in implementation. The results have implications for bureaucratic personnel politics, political appointments, and the efficacy of managerial strategies.

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1 Introduction

In bureaucratic policymaking delegation is the rule, not the exception. Congress writes authorizing legislation empowering agencies to craft and implement public policy. The President empowers agency heads to pursue the Administration's policy goals. Agency heads direct career civil servants to craft and implement policy objectives.[1] Put simply, the vast majority of public policy in the United States is promulgated by bureaucrats who were empowered to act by some political principal (Warren 2004). There are many reasons posited for why delegation is necessary, including to take advantage of relative expertise due to policy environmental complexities generally (Epstein and O'Halloran 1994; Spence and Cross 2000; Gersen and Vermeule 2012), or to provide incentives for specialization (Gilligan and Krehbiel 1987), information gathering (Gailmard and Patty 2007, 2013*b*), and efficiency or reliability (Ting 2002, 2003).[2]

While delegation may be used to solve several problems it does not come without cost. Once policymaking authority is conferred from a principal to an agent potential problems arise, known as political agency problems. First, agents may be *biased* and prefer policy outcomes that diverge from those of the principal. In this case the agent may attempt to subvert the principal's wishes once authority is transferred by making incongruent policy choices (Gailmard 2002).[3] Second, the agent may *slack* on pursuing high quality outcomes. In this case the principal's worry is that the agent will invest insufficient effort toward effective implementation or enforcement of policy (Bueno de

[1] See Bendor, Glazer and Hammond (2001) for a comprehensive overview of different theories of delegation, and Gailmard and Patty (2013*a*) for a more recent review dealing with bureaucratic politics specifically.

[2] Normatively, there are those that have argued that delegation to agencies enhances democratic representation through its effects on policy legitimation (Meier 1997; Meier and O'Toole 2006). Others have argued that delegation is largely undesirable. Most notably, Lowi (1979) argued that delegation was a democratically illegitimate abdication of authority by Congress.

[3] Examples that other scholars have labeled bias or drift include agency capture by regulated or interested groups (Carpenter and Moss 2013; Niskanen 1971), selection practices and career concerns of bureaucrats (Heclo 1988), cognitive and/or institutional biases, or implicit motivations (Gailmard and Patty 2007; Prendergast 2007; Seidenfeld 2002).

Mesquita and Stephenson 2007). Both of these potential problems can lead to low quality policy outcomes from the principal's perspective. Put simply, bureaucratic policymakers are tasked with not only crafting the substance of policy, but also implementing it effectively whatever the substantive content (Carpenter 2001; Derthick 1990; Lipsky 1980).

Two commonly proposed solutions to these agency problems are extensive oversight and delegating to allies. The logic underlying the ally principle is straightforward and has been shown to hold in diverse environments (Bendor and Meirowitz 2004).[4] All else equal, a principal prefers to authorize an ally agent because the agent can be expected to take actions in line with the principal's interests regardless of informational or experiential advantages. However, the situation becomes more complicated when effort to improve implementation quality is introduced. Since effort is often costly to the agent alone, he cannot precommit to effort levels. The principal, in this case, must also consider the provision of proper effort incentives, which can be supplied through oversight.

While there are many forms of bureaucratic oversight, one of the most prevalent forms is to subject an agent's decision-making authority to ex post review by a third party that has the power to either accept or reject agent-made policy. Common examples include the federal judiciary and the Office of Information and Regulatory Affairs (OIRA) in the President's Office of Management and Budget (OMB). The former is empowered to act as a bureaucratic overseer through judicial review provisions written into authorizing legislation.[5] Similarly, proposed rules and regulations must successfully pass review by the OIRA before they become binding policy. Essentially, the overseer has the ability to veto agent-made policy. In both cases, a principal has not only authorized a bureaucratic agent to make policy but has also subjected the agent's actions to subsequent review, and possible rejection, by another political actor or institution. The overseer will also often have prefer-

[4]For example, the principal prefers to choose a "clone" of herself as her agent (Gailmard and Patty 2013*b*) and grants more discretion to an ally agent (Epstein and O'Halloran 1994) when she wants to induce expertise acquisition (Gailmard and Patty 2007), or when uncertainty is high (Bendor, Glazer and Hammond 2001; Moe 2012).

[5]Shipan (1997) provides a comprehensive study of the politics surrounding the choice of these provisions. Additionally, the Administrative Procedures Act (APA) directs courts to engage in so-called hard look review of agency regulations and overturn actions found to be "arbitrary and capricious" (Breyer 1986).

ences that diverge from those of the principal, further compounding the political agency problems inherent in the policy process. This raises the question: when does a political principal benefit from authorizing an agent to make policy on her behalf given that the agent, once authorized, faces oversight? Moreover, if the principal does benefit from delegating policymaking authority, what type of agent would she prefer?

In this paper we develop a political-institutional theory of policymaking and show that if *bias* and *slack* are both potential problems, the potential solutions — delegating to allies and extensive oversight — interact in unexpected ways. The dynamics of oversight imply that anytime oversight matters with respect to agent effort incentives, the principal is best served by delegating to a biased agent rather than an ally. Oversight and agent bias interact in such a way that neither will strengthen agent effort incentives unless both do simultaneously. This has upstream effects on whether the principal benefits from delegation at all and whether the principal is made better off by authorizing an ally or biased agent to make policy.

The basic intuition is that the ally principle is violated anytime oversight is effective at providing positive effort incentives for the agent due to the fact that the agent sets the substance of policy *and* invests effort to develop the capacity to implement effectively. Crucial to the theory is the fact that this insight only holds because of the intervening influence of ex post oversight. Even if a principal benefits from delegating policymaking authority when oversight is ineffective, she never benefits from a biased agent relative to an ally. Otherwise, when oversight is effective, agent bias serves two interrelated purposes that increase the agent's effort investments in equilibrium. First, it increases the agent's own motivations to invest more effort to ensure that his policies are realized. Second, it increases the stringency of oversight, which in turn increases the effort the agent must invest in order to have his preferred policy realized. The principal can benefit from leveraging this dynamic by delegating policymaking authority to a biased agent. She can play the other actors' biases off one another to induce higher levels of effort investment than would be possible if there were no effective oversight *and* if the principal engaged in oversight herself. Thus, while there are situations where the principal *will* delegate policymaking authority to an ally agent, she is better off under

particular institutional environments delegating that authority to a biased agent provided oversight is effective as an institutional check on agent behavior. It is instrumentally valuable for a political principal to delegate policymaking authority to an agent that will make policy in a politicized (i.e., ideologically contentious) policymaking environment.

The main insights contribute to literature on political control and delegation directly. In terms of the effect of oversight on policymaking incentives, previous work has uncovered its impact on incentives for politicians to pander in electoral settings (Fox and Stephenson 2011), incentives to exert costly effort (Bueno de Mesquita and Stephenson 2007; Stephenson 2006), the relationship between legislatures and courts (Rogers 2001; Rogers and Vanberg 2002; Vanberg 2001), inducing more ideologically desirable policy (Wiseman 2009), and information acquisition and more informed policymaking (Dragu and Board 2013). While this paper shares the goal of further understanding how institutions like judicial or executive review impact policymaking, we contribute to this literature by going beyond the direct effects of oversight on policymaking incentives. We extend the analysis to speak to how these effects also impact the incentives for political principals to delegate authority and what types of agents are preferable given that delegation itself is desirable.[6] Further, we take seriously the dichotomy between setting the substance of policy and investing effort to more effectively implement policy and, accordingly, our results speak directly to how oversight and agent bias impact agent effort incentives.

By explicitly modeling this dichotomy, we add to literature examining institutional determinants of bureaucratic behavior by assuming that the bias or drift problem is unsolvable directly. There are many papers that have generally focused on substantive policy choice by exploring how signaling dynamics affect bureaucratic behavior from many angles, and have provided invaluable insight in the process.[7] In contrast, we complement these existing studies by holding agent bias

[6]The way we model oversight as ex post review with a veto and how it structures agent incentives is also related to a family of models examining agent retention and career concerns under different combinations of moral hazard and adverse selection (see Banks and Sundaram 1993, 1998, for canonical examples).

[7]For instance, see Boehmke, Gailmard and Patty (2006); Carpenter and Ting (2007); Gailmard and Patty (2007, 2013*b*,*c*); Gilligan and Krehbiel (1987, 1989); Gordon and Hafer (2005); Patty (2009); Stephenson (2006); Ting (2008).

fixed. We structure the model so that the agent invests effort toward implementation improvements prior to learning the nature of the policy environment. Then the agent learns about the environment and sets the (possibly biased) substance of policy spatially. The overseer, meanwhile, only reviews the agent's effort investment decision. Substantively, this type of oversight represents the fact that many times oversight institutions are at an informational disadvantage relative to agencies with respect to the proper substantive content of policy. In this way our model captures the empirical reality that oversight institutions like courts have moved heavily toward procedural, rather than substantive, review of administrative actions in recent times (e.g., Kagan 2001). The overseer reviews the agent to ensure he has invested sufficient effort to produce high quality policy implementation. Moreover, this focuses attention directly on incentive provision on the effort dimension while suppressing signaling in the game. This setup also implies that the agent in our model, if authorized to make policy, has full discretion to set the substance of policy, which depends on his bias in equilibrium.[8] Overall, our analysis complements existing work focused on ameliorating the potential *bias* in the content of policy by directly addressing the relatively understudied effect of oversight institutions on the incentives for agents to invest effort to *implement* or enforce policy effectively. Indeed, in our model bias can prove to be instrumentally valuable for the principal precisely because it can be coupled effectively with oversight institutions to strengthen agent effort incentives.

Our focus on what types of agents the principal benefits from also complements literature examining optimal agent bias. Bendor and Meirowitz (2004) show that principals may prefer biased agents to allies if biased agents are willing to work harder or have some type of valence that is correlated with their bias and is beneficial for the principal. We provide a distinctly political-institutional microfoundation for why biased agents can be preferable for principals concerned with motivating desirable investments in valence. The theory developed here does not assume that biased agents are *per se* better suited to invest effort toward implementation improvement. Rather, agent bias only

For an overview of signaling games as applied to bureaucratic politics in particular see Gailmard and Patty (2013*a*).

[8]That is, the agent in our model has both *formal* and *real* authority to set policy spatially (Aghion and Tirole 1997).

motivates effort investments if effective oversight is present in the policymaking environment.[9]

The logic we present in this paper is also similar to work that has shown that agent bias is useful in delegation situations to induce specialization (Gilligan and Krehbiel 1987, 1989; Krehbiel 1991) or generate bargaining power following delegation (Bertelli and Feldmann 2007; Gailmard and Hammond 2011). For instance, Gailmard and Hammond (2011) argue that the House of Representatives has incentive to create biased committees to increase House bargaining power relative to the Senate. The authors write that, "an unrepresentative committee is a veto constraint for the other chamber..." (p. 541). In our theory, the principal benefits from a biased agent precisely because she is able to sidestep her own commitment problems by leveraging those of the overseer. A biased overseer represents a "tougher veto point" with respect to agent policymaking, which the agent responds to by investing higher levels of effort to satisfy the overseer. The more divergent the agent and overseer's ideal points, within reasonable limits, the more this dynamic intensifies effort incentives. While the logic between our theory and this body of work are related, we extend and complement it. First, as noted above, we incorporate both the substantive setting of policy and effort investments to improve implementation in one framework. Both are key to our results. Second, in our theory the presence of effective oversight is a necessary condition for agent bias to strenthen effort investment incentives. Put simply, while the focus on incentives is similar, the institutional environments analyzed are quite distinct.

Overall, the theory developed in this paper provides novel insight into the institutional situations and policy environments in which biased policymaking can benefit political principals, i.e., the ally principle fails. Anytime oversight is an effective tool for political control, if the principal

[9]More generally, several previous studies have shown that, at times, principals prefer biased agents based on divergent beliefs (Che and Kartik 2009), the optimal distribution of tasks between agents and reviewers (Bubb and Warren 2014), the need to induce information disclosure (Dessein 2002), to incentivize costly investment in policy development (Hirsch and Shotts 2015), and to reduce rent-seeking by electorally motivated politicians (Van Weelden 2013). We provide results that are similar in the sense that they also imply a rationale for why political principals may prefer a biased agent, however, we diverge from previous work by analyzing an environment in which the institution of oversight is a necessary condition for the ally principle to fail when agent bias and slack are both concerns.

benefits from delegation at all, she benefits from delegating authority to a biased agent who will subsequently face a biased overseer in the policymaking game. Without the intervening dynamics of effective oversight, the ally principle holds, otherwise political principals derive instrumental value from the dual usage of oversight and agent bias as institutional effort motivators when bias and slack are both concerns.

The remainder of the paper proceeds as follows. The next section presents the model. Then we analyze the dynamics of oversight by characterizing the agent-overseer subgame assuming the principal authorizes the agent to make policy. Following that, we turn to characterizing when the principal chooses to delegate policymaking authority and when she benefits from empowering a biased agent relative to an ally. We then discuss several empirical implications for various aspects of U.S. bureaucratic politics and conclude.

2 The model

We study a simplified model of policymaking between three players: a principal (P) that chooses whether to authorize an agent to make policy on her behalf, an agent (A) that, if authorized by the principal, makes policy, and an overseer or reviewer (R) that has the power to review and invalidate agent policy actions. The game tracks the formation of a single, final policy, denoted by y. The final policy outcome depends on players' choices within the game. Agent-made policy is only realized if (1) the principal chooses to delegate policymaking authority to the agent, and (2) the overseer chooses to uphold (rather than overturn) the agent. If the principal does not delegate authority or the agent is granted policymaking authority but the overseer reverses him, then an unregulated outcome is realized. Players desire final policy to coincide with their preferences given the constraints introduced through the other players' strategies and the contingencies of the policy environment.

The nature of the policy environment is captured by a true state of the world, denoted by $\omega \in \Omega = \mathbb{R}$, that is drawn by a non-strategic player ("Nature") at the beginning of the game according to cumulative distribution function F, which is symmetric around mean 0 with strictly positive, finite variance V_F. The state variable ω is meant to capture the contingencies of the policy environment and

its realization can therefore be understood as being predicated on the unregulated private interactions between individuals or firms. Conditional on players' preferences and actions, the realization of ω leads to the potential for biased policy output. Only the agent learns ω, which occurs only if the principal delegates authority (i.e., the agent is an "expert" relative to the principal and overseer). The other players never observe ω, but the characteristics of F are common knowledge. There is also an *implementation shock* that can shift agent-made policy away from its substantive intent. This captures the possibility for slack because the agent can reduce the variance of the shock with ex ante effort investments. Let $\varepsilon \in \mathbb{R}$ represent this shock and be distributed according to cumulative distribution function $G_\varepsilon(e)$ that is symmetric around mean 0 with strictly positive, finite variance $V_\varepsilon(e)$. The likely magnitude of the implementation shock is decreasing in agent effort investments. Specifically, the variance of $G_\varepsilon(e)$ is continuously strictly decreasing and convex in agent effort (denoted by e). This ensures $V_\varepsilon(e) < V_\varepsilon(e')$ if and only if $e > e'$.[10] The more effort the agent invests toward implementation, the more precise is agent-made policy. The characteristics of $G_\varepsilon(e)$ are common knowledge, but no player observes ε directly.

Given this setup, both bias and slack can lead to inefficient agent-made policy outcomes. Insufficient ex ante effort investments toward implementation improvements can lead to inefficient policy outcomes *even when the principal and agent are ideological allies*. Similarly, agent bias can lead to the substantive content of policy being set away from ω, which harms principal welfare when principal-agent preferences diverge *even when the agent has invested maximal effort toward precise implementation*. Thus, both bias and slack are omnipresent concerns for a principal interested in policy matching the true state in this model.

The timing of the game proceeds as follows. First, Nature (privately) draws ω according to F. The principal then, without observing ω, chooses whether to authorize the agent to make policy on her behalf. This choice is denoted by $a \in \{0,1\}$ where $a = 1$ represents a choice to delegate and $a = 0$ to not. If $a = 0$ then the game ends, ω obtains unencumbered by agent regulation, and payoffs are realized. If $a = 1$ then the agent chooses an effort investment level $e \in [0,1]$. Following

[10] That is, $\forall e > e'$, $G_\varepsilon(e)$ second-order stochastically dominates $G_\varepsilon(e')$.

effort investment, the agent learns ω and chooses a substantive policy target $x \in X = \mathbb{R}$. The ex ante nature of the agent's investment focuses on realistic policymaking environments in which agencies must develop capacity to adequately implement policies once they are authorized to act.[11] Finally, the overseer observes the agent's effort investment e, but not x, y, or ω, and chooses to either uphold or overturn. This choice is denoted by $r \in \{0,1\}$ where $r = 0$ represents deference to the agent and $r = 1$ reversal. If $r = 1$ then the game ends, ω is realized, and players receive their payoffs. If $r = 0$ then Nature draws ε according to $G_\varepsilon(e)$, which is conditional on the agent's choice of e, the game ends, agent-made policy obtains, and payoffs are realized.[12] Accordingly, final policy outcomes are realized according to the following function,

$$y = \begin{cases} x - \omega + \varepsilon & \text{if } a = 1 \text{ and } r = 0, \\ -\omega & \text{if } a = 0 \text{ or } a = 1 \text{ and } r = 1. \end{cases} \tag{1}$$

Each players' induced preferences over policy depend on their respective "type" or ideal point, denoted by $t_i \in \mathbb{R}$, $i \in \{P, A, R\}$. Each players' ideal point dictates their welfare-maximizing policy outcome relative to ω. We normalize the principal's ideal point so that $t_P = 0$, which implies that the principal is solely concerned with final outcomes matching the state. We also assume that the overseer's ideal point is to the left of the principal so that $t_R < 0$. The analysis focuses on how oversight, agent authorization, and policymaking incentives vary as t_A varies relative to the other players' ideal points. The payoffs of the principal, the agent, and the overseer are given by the

[11] For instance, Carpenter (2001) distinguishes an agency's analytic and programmatic capacity. The former relates to technical knowledge, or knowledge of ω in our model, while the latter represents the agency's ability to effectively apply policy in practice, which we proxy through ex ante effort investments. More generally, this tracks a growing literature on agency capacity (Huber and McCarty 2004; Ting 2011), and can also be understood through the lens of "street level bureaucracy" (Lipsky 1980).

[12] The important part of Nature's choice of ε is that no players observe ε, and therefore cannot react to it, but all players understand how agent effort impacts the realization of ε given their common knowledge regarding $G_\varepsilon(e)$.

following expressions, respectively.

$$\begin{aligned} u_P(e,y,r) &= -y^2 - ca, \\ u_R(e,y,r) &= -(y-t_R)^2, \\ u_A(e,y,r) &= -\beta(y-t_A)^2 - \kappa e - \pi r. \end{aligned}$$

As noted above, the principal wants outcomes that match ω, but does take into account her potential authorization costs. If the principal chooses to authorize the agent she incurs authorization costs $c \geq 0$. This captures the fact that authorizing an agent to make policy requires an investment by the principal. Legislatures must write authorizing legislation and allocate budgetary resources, the President must outline administrative goals or directives, and agency heads must establish policy goals, staff departments, and outline procedures to direct the actions of bureaucratic subordinates. In all of these cases the principal incurs direct or indirect costs associated with making the choice to authorize an agent to make policy on her behalf. If the principal chooses not to authorize the agent to make policy then she foregoes paying this cost, but she must accept the realization of unregulated outcomes (ω). The overseer seeks to minimize the distance between realized policy (y) and its ideal point t_R. The agent also desires policy outcomes to be realized as close as possible to his ideal point, but his policy motivations, relative to the other components of his utility and the motivations of the other players, is captured by $\beta > 0$. Agent policy motivations increase in β. This can represent stronger "sense of mission" within an agency (Wilson 1989), a higher ratio of zealots to slackers (Gailmard and Patty 2007) or political appointees to career civil servants (Lewis 2008), or simply higher intrinsic policy motivations for the bureaucratic agent (Prendergast 2007). All else equal, players prefer more effective implementation generated through increased agent effort investment, but only the agent bears the costs of investing that effort, denoted by $\kappa > 0$. This effort cost captures intuitive concepts of building bureaucratic capacity like increased staffing, investing time and resources toward streamlining procedures, or expanding enforcement programs (Huber 2007). Finally, the agent is also averse to being overturned by the overseer, captured by $\pi > 0$. The higher

π, the more averse the agent is to being overturned. While we are agnostic as to the microfoundations of this parameter, it captures intuitive, realistic concepts based on considerations like career concerns, e.g., agent reputational losses for looking incompetent, budgetary considerations, etc. It suffices to simply think of π as a reversal cost the agent must internalize if he is overturned. The parameters are exogeneous and common knowledge.

We utilize perfect Bayesian equilibrium (PBE) in weakly undominated strategies. The principal's strategy consists of an agent authorization choice. Denote this strategy by s_P and the principal's equilibrium authorization choice by $a^* \in \{0,1\}$. The principal also has beliefs over ω and ε, which are represented by μ_P, a cumulative distribution function that represents a probability distribution over ω and ε. The agent's strategy consists of an effort investment choice denoted by s_A^e, and a policy mapping conditional on the realization of ω denoted by $s_A^x(\omega)$. Further denote the agent's equilibrium effort choice as e_A^* and his equilibrium substantive policy choice conditional on ω as $x_A^*(\omega)$. The agent also has beliefs over ε denoted by μ_A. The overseer's review strategy consists of a mapping from the set of agent effort levels and the potential policy outcomes into a review decision. Denote this strategy by $s_R(e)$ that holds for any agent effort level $e \in [0,1]$ and potential policy outcome $y \in \mathbb{R}$. The overseer also has beliefs over ω and ε characterized in the same manner as the principal's beliefs, which are denoted by μ_R. A PBE is a complete profile of strategies and beliefs $\rho = (s_P, \mu_P, s_A^e, s_A^x, \mu_A, s_R, \mu_R)$ such that all players are maximizing their expected payoffs given other players' strategies and, when applicable, beliefs are consistent with Bayes's rule.[13]

3 Oversight, bias, and agent effort investments

In this section we analyze the interactions between the agent and the overseer assuming that the principal has authorized the agent to make policy. To begin, the agent will always set policy at his ideal point.[14] That is, the agent's equilibrium substantive policy choice is $x^*(\omega) = \omega + t_A$. This is

[13] Given the set-up, these beliefs will always be pinned down by Bayes's rule.

[14] While this is out of order in the sense of working backward through the game, making this observation up front aids in simplifying exposition of the overseer's equilibrium strategy.

a weakly dominant strategy for the agent, independent of his effort investment and the overseer's oversight strategy, because the overseer does not observe x directly. Moreover, the agent's effort investment is a sunk cost at this point of the game, the implementation shock has mean zero, and the agent's utility is separable in his effort and substantive policy choices. This feature of the equilibrium can be thought of as the agent making *sincere* policy choices (from his point of view). It also isolates the effects of oversight on agent effort investment incentives and the principal's potential ability to exploit agent bias to reduce slack. We now turn to the overseer's optimal oversight strategy.

The overseer's equilibrium strategy is driven by the desire to minimize the distance between its ideal point and realized outcomes. However, oversight is limited to a veto of agent-made policy, which is in line with the types of oversight discussed in the introduction. Courts, executive reviewers, and intra-agency veto points can often only accept or reject policies rather than supplant them with their own policy The overseer, upon observation of the agent's effort investment, can only accept the expected losses from upholding agent policy actions or overturn the agent and accept the expected losses from allowing unregulated outcomes to obtain. With this in mind, the overseer's net expected payoff from upholding the agent is given by,[15]

$$\Delta U_R(\text{uphold: } r=0;\rho_{-i}) = -t_A^2 + 2t_A t_R - V_\varepsilon(e) + V_F.$$

Incentive compatibility implies that the overseer will uphold the agent, given his bias t_A and observed effort investment e, if and only if $\Delta U_R(\text{uphold: } r=0;t_A,e) \geq 0$. Rearranging the net expected payoff yields the incentive compatibility condition for the overseer to uphold an agent with bias t_A who invested effort e:

$$\underbrace{V_F - V_\varepsilon(e)}_{\text{Implementation improvement}} \quad \geq \quad \underbrace{t_A^2 - 2t_A t_R}_{\text{Net spatial policy losses}} \tag{2}$$

Equation 2 provides an intuitive condition that must be met for the overseer to uphold the

[15]We use the notation $U_i(\cdot;\cdot)$, $i \in \{P,A,R\}$ to represent players' expected utility given their proposed action and those of the other players. We also use $\Delta U_i(a;\rho_{-i}) \equiv U_i(a;\rho_{-i}) - U_i(b;\rho_{-i})$ to represent the net expected payoff for player i taking action a instead of action b given the expected behavior of the other players in equilibrium.

agent. The agent must invest sufficient effort to improve the quality of implementation, relative to the volatility of the underlying policy environment, enough to offset any spatial policy losses incurred by his bias. The more effort the agent invests to improve implementation the more likely it is equation 2 will be satisfied. Conversely, the more biased the agent is relative to the overseer the less likely it will be satisfied. This implies that the more biased the agent is relative to the overseer, the more stringent is oversight. However, the more volatile the underlying policy environment, the less stringent is oversight. The agent making policy becomes more important the more volatile is the underlying policy environment. This highlights a commitment problem for the overseer: the more the agent is needed to regulate, the less demanding oversight is with respect to effort investments.

Since implementation quality is strictly increasing in agent effort investments, the overseer's equilibrium strategy is equivalent to an effort threshold. Denote this threshold as $\underline{e}_R(t_A)$. If such an e exists, this threshold is the minimum level of effort investment an agent must make in order to be upheld by the overseer given his bias: assuming such an e exists, $\underline{e}_R(t_A) \equiv e$ such that $V_F - V_\varepsilon(e) = t_A^2 - 2t_A t_R$. An effort investment that solves equation 2 with equality may not always be feasible. In cases where there is no $e \in [0,1]$ that solves equation 2 with equality, the overseer either always overturns or always upholds the agent. We discuss these scenarios in greater detail below. When there does exist a feasible e that solves equation 2, the agent must invest, at a minimum, that level of effort to receive deference. For the remainder of the analysis we focus on the more interesting cases in which the agent can invest effort sufficient to satisfy the overseer's threshold as defined. This yields the following equilibrium oversight strategy,

$$s_R^*(e) = \begin{cases} \text{uphold: } r = 0 & \text{if } e \geq \underline{e}_R(t_A), \\ \text{overturn: } r = 1 & \text{otherwise.} \end{cases} \tag{3}$$

The impact of oversight on agent effort investments depends crucially on the agent's bias relative to the overseer. If the agent is too biased then the overseer will never uphold the agent, regardless of effort investment levels. In this case the overseer is perfectly skeptical of regulatory intervention. This environment is one in which even if the agent makes a maximal effort invest-

ment, $e = 1$, to improve implementation quality, he cannot offset spatial policy losses.[16] That is, if t_A is sufficiently extreme relative to t_R so that equation 2 fails to hold even when $e = 1$ then the overseer always prefers unregulated outcomes. Note that the level of agent bias that is *too biased* is increasing in the volatility of unregulated outcomes, V_F. The more an agent is needed to improve implementation, the more biased he can be before the overseer becomes perfectly skeptical.

In this case the agent responds by never investing positive effort. If an agent with this level of bias makes any positive effort investment, given the overseer will overturn with certainty, he incurs a net utility loss proportional to the cost of that investment κ. Thus, when facing a perfectly skeptical overseer, the agent never invests any positive effort toward implementation quality.

On the other extreme, if the agent is too moderate relative to the overseer he will never be overturned. In this environment we say that the overseer is perfectly deferential to the agent. This is the case anytime spatial policy losses are offset even when the agent invests zero effort toward implementation. That is, if t_A is sufficiently close to t_R such that equation 2 holds even when $e = 0$ then the overseer can never commit to overturning the agent. The level of bias that can support perfect deference is increasing in unregulated outcome volatility, V_F. All else equal, the more volatile unregulated outcomes become, the less stringent oversight becomes and the harder it is for the overseer to commit to overturning a relatively low-bias agent. This reveals a pathological limitation of oversight in this model: if the agent *is not biased enough* relative to the overseer then oversight plays no effective role in the provision of agent effort incentives.

It may seem intuitive that in response to perfect deference the agent again never invests positive effort since he will be upheld regardless. However, the agent is intrinsically motivated to improve outcomes. While oversight as an institution does not impact effort investments in this case, the agent's own motivations do. Since the overseer will never overturn the agent, the agent makes effort investments based solely on his own motivations. Denote this effort choice by,

[16] Recall also that this case (*perfect skepticism*) and the one to follow (*perfect deference*) are the regimes that would result from the lack of an effort investment e that would solve equation 2 with equality, as discussed above.

$$\hat{e}_A(\beta,\kappa) \in \arg\max_e -\beta V_\varepsilon(e) - \kappa e. \tag{4}$$

When the overseer is perfectly deferential, the agent chooses a level of investment as if there were no oversight. In this case the agent's effort investment is greater than the overseer's threshold level of acceptable effort investment: $\hat{e}_A(\beta,\kappa) \geq \underline{e}_R(t_A)$. This follows from the fact that oversight is not stringent enough to bind the agent's investment decision. Intuitively, the agent's investment in this case is increasing in his implicit policy motivations, β, and decreasing in effort costs, κ.

The final, most interesting, environment is one in which the agent's effort investment *is* affected by oversight. In this case the overseer employs conditional-deference. The agent is biased enough away from the overseer that the agent's unconstrained effort investment $\hat{e}_A(\beta,\kappa)$ is not sufficient to satisfy the overseer's threshold $\underline{e}_R(t_A)$. That is, given the arrangement of t_A and t_R in this environment, the agent's effort investment based on his own motivations is not enough to satisfy the overseer's threshold. However, there is a level of effort the agent could invest that would satisfy this threshold and lead to deference.

Accordingly, the agent responds by deciding if he is better off investing the threshold level of effort required to be upheld or making no effort investment and being overturned.[17] With this in mind, consider the agent's net expected payoff for an effort investment sufficient to be upheld,

$$\Delta U_A(e \geq \underline{e}_R(t_A); r^*(e) = 0) = \beta(t_A^2 + V_F - V_\varepsilon(e)) - \kappa e + \pi.$$

Incentive compatibility implies that the agent will invest enough effort to be upheld if $\Delta U_A(e \geq \underline{e}_R(t_A); r^*(e) = 0) \geq 0$. Solving the agent's incentive compatibility condition for e so that it holds with equality, and bounding the problem to ensure that a feasible solution always exists, yields the maximum level of effort investment the agent is willing to make to be upheld when facing a

[17]Note that if it is not incentive compatible for the agent to invest the threshold level of effort to be upheld then he makes zero effort investment because any positive investment that fails to the meet the threshold results in a net utility loss equal to the cost of that investment, as in the perfectly skeptical case.

conditional-deference overseer:[18]

$$e_A^{\max}(t_A) = \max\left[\min\left[\frac{\beta(t_A^2 + V_F - V_\varepsilon(e_A^{\max}(t_A))) + \pi}{\kappa}, 1\right], 0\right]. \tag{5}$$

If the maximum level of effort the agent is willing to invest to be upheld exceeds the threshold required by the overseer then the agent does so. Otherwise, if $e_A^{\max}(t_A) < \underline{e}_R(t_A)$ then the agent invests zero effort and accepts being overturned. Thus, when facing conditional-deference oversight ($\underline{e}_R(t_A) > \hat{e}_A(\beta, \kappa)$) the agent will make an effort investment exactly equal to the overseer's threshold if and only if $e_A^{\max}(t_A) \geq \underline{e}_R(t_A)$, and invest nothing otherwise.

Taken collectively the oversight/effort investment combinations described above imply the following optimal effort investment strategy for the agent,

$$s_A^{e*} = \begin{cases} \hat{e}_A(\beta, \kappa) & \text{if } \hat{e}_A(\beta, \kappa) \geq \underline{e}_R(t_A), \\ \underline{e}_R(t_A) & \text{if } \hat{e}_A(\beta, \kappa) < \underline{e}_R(t_A) \text{ and } e_A^{\max}(t_A) \geq \underline{e}_R(t_A), \\ 0 & \text{if } \hat{e}_A(\beta, \kappa) < \underline{e}_R(t_A) \text{ and } e_A^{\max}(t_A) < \underline{e}_R(t_A), \end{cases} \tag{6}$$

where $\underline{e}_R(t_A)$ is defined as e such that equation 2 holds with equality, $\hat{e}_A(\beta, \kappa)$ is implicitly defined by equation 4, and $e_A^{\max}(t_A)$ is implicitly defined by equation 5.

There are a few aspects of the agent's equilibrium effort investment strategy worth noting further. First, notice that the presence of an overseer can induce higher levels of effort investment from the agent than if there were no oversight. This is the second case of s_A^{e*} in which $\hat{e}_A(\beta, \kappa) < \underline{e}_R(t_A)$ and $e_A^{\max}(t_A) \geq \underline{e}_R(t_A)$. Conversely, the overseer can also induce the agent to invest lower effort than he would otherwise. This is the third case of s_A^{e*} in which $\hat{e}_A(\beta, \kappa) < \underline{e}_R(t_A)$ and $e_A^{\max}(t_A) < \underline{e}_R(t_A)$. In this case the overseer provides a "deterrence effect" for the agent. Since implementation effort investment is costly, the agent is deterred from investing any effort at all because the overseer

[18]The assumptions made are to ensure that a solution exists within the specified effort range, $[0, 1]$. Specifically, since the fraction derived from rearranging the agent's incentive compatibility condition to solve for e can dip below 0 or rise above 1 we bound the problem using max and min operators to rule out these possibilities.

will not allow outcomes to turn out worse than the reversion level of policy precision (V_F), which in this case is not *bad enough* to induce the agent to invest more effort.[19] Combining all of the analysis above yields the subgame equilibrium for agent and overseer interactions when the agent has been authorized to make policy, embodied in the following proposition.

Proposition 1. *Suppose the agent is authorized to make policy by the principal. Then a PBE of the agent-overseer subgame is characterized by the following collection of strategies,*

1. *The agent makes effort investments according to s_A^{e*}, given by equation 6,*
2. *The agent always sets policy at his ideal point, $x^*(\omega) = \omega + t_A$,*
3. *The overseer makes review decisions according to $s_R^*(e)$, given by equation 3.*

Figure 1 provides a graphical example of the agent-overseer subgame equilibrium. The y-axis represents agent effort investment level, while the x-axis captures the distance between overseer and agent ideal points. Agent bias relative to the overseer is increasing left to right on the horizontal axis. The dotted (flat) line represents the agent's effort investment when he will always be upheld: $\hat{e}_A(\beta, \kappa)$. When the agent's ideal point is sufficiently close to the overseer's, oversight does not bind the agent's effort decisions. In this case, the agent invests effort based on his own motivations without taking into account the overseer since $\hat{e}_A(\beta, \kappa) > \underline{e}_R(t_A)$ (the gray line). As the agent becomes more biased there is a point at which the overseer begins to require positive effort investments (the gray line begins increasing with agent bias). Past the point at which $\hat{e}_A(\beta, \kappa) = \underline{e}_R(t_A)$ the maximum effort investment the agent is willing to make becomes the operable function (black dashed line). So long as $e_A^{\max}(t_A) \geq \underline{e}_R(t_A)$ the agent invests effort at the overseer's threshold and is upheld. This is the intermediate region of equilibrium effort investment in the figure where the solid black line tracks the overseer's threshold. As the agent continues to become more biased, oversight becomes

[19] This deterrence effect is qualitatively similar to the "bail out effect" provided by judicial review identified in previous theoretical work. Specifically, it is related to the way in which judicial review bails out candidates in an electoral environment identified in Fox and Stephenson (2011) and the dissuading effect of review on the choice to regulate as in Bueno de Mesquita and Stephenson (2007). Oversight effects in this model complement these papers.

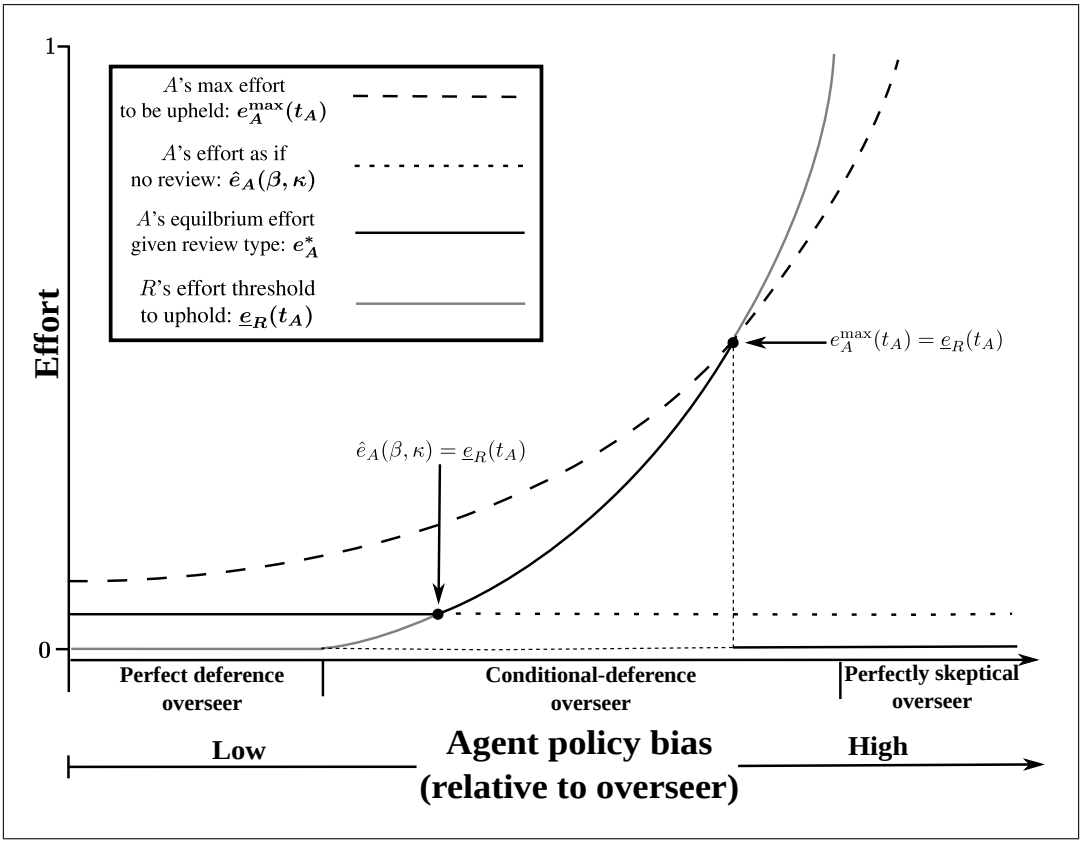


Figure 1: An Example of Equilibrium Effort Investments Conditional on Agent Bias.

more stringent and the agent becomes willing to invest higher levels of effort to be upheld. However, once the agent becomes too biased, i.e., $e_A^{\max}(t_A)$ drops below $\underline{e}_R(t_A)$, equilibrium effort investments drop to 0. Oversight becomes too demanding and the agent is no longer willing to invest enough effort to be upheld. This is the final solid black line segment in the figure. Figure 1 also provides visual intuition for the main result characterizing the relationship between oversight, bias, and agent effort investments, described in the following proposition.

Proposition 2. *In equilibrium, agent bias strengthens agent effort investment incentives if and only if oversight also strengthens these incentives.*

Proposition 2 presents a central result for the theory developed here. When oversight does not effectively strengthen effort incentives for the agent neither does agent bias. When the agent is not too biased he simply invests effort based on his own motivations (β and κ). Neither the agent's bias

(t_A) nor oversight (through π) play a role in this investment. Similarly, when the agent is too biased, effort investments are also invariant. They are always zero since the agent will always be overturned. In fact, in this case effort incentives are *weakened* and the agent is deterred from investing any effort. However, in the intermediate range of agent bias, effort investments are increasing in both agent bias and the agent's aversion to being overturned, which only applies when oversight is effective. Thus, an agent's bias induces higher effort investments if and only if the presence of oversight also does. This illustrates a fundamental interdependence between utilizing tools like staffing an agency with zealots rather than slackers (Gailmard and Patty 2007) or presidential appointees rather than careerist civil servants (Lewis 2008, 2011) and institutionalized oversight to impact agent effort incentives. One is not effective without the other. This raises two interrelated questions based on the dynamics described in this section. First, when does a political principal benefit from authorizing an agent to make policy on her behalf? Second, when delegation is beneficial does the principal benefit from authorizing an ally or biased agent to make policy?

4 The instrumental value of politicized policymaking

In this section we explore when, and under what circumstances, a political principal benefits from authorizing a biased agent to make policy on her behalf. The dynamics between agent effort investment and oversight described in the previous section play a central role. Anytime the principal chooses *not* to delegate authority she receives the following expected payoff,

$$U_P(a = 0) = -V_F.$$

Since not authorizing the agent to make policy is equivalent to allowing unregulated outcomes to obtain, the principal loses utility equal to her expectation of these outcomes. Whether the principal finds it beneficial to authorize the agent depends on the relative locations of agent and overseer ideal points. If authorized, the agent will invest effort according to the subgame equilibrium characterized above. We analyze the principal's choices based on which environment the agent and overseer would be in following delegation: perfectly skeptical, perfectly deferential, or conditional-deference.

The first case is one in which the agent will always be met with reversal. This is true anytime it is not incentive compatible for the agent to invest sufficient effort to be upheld, which could be because it is impossible to do so — the agent is so biased that the overseer will never uphold — or because oversight is too stringent and the agent is not willing to invest at the overseer's threshold — $e_A^{\max}(t_A) < \underline{e}_R(t_A)$. In either environment, if the principal does authorize the agent to make policy, knowing that he will ultimately be overturned, she can expect to simply bear the costs of authorization,

$$\Delta U_P(a = 1; r^*(e^*) = 1) = -c.$$

In terms of policy, this payoff is equivalent to the principal simply not authorizing the agent. In both instances, final outcomes are predicated on the unregulated actions of private individuals or firms. However, she must also incur the authorization costs to empower the agent. Intuitively anytime the principal would pay a positive cost, $c > 0$, for authorizing an agent to make policy just to see that agent's actions overturned, she is better off simply ending the game by not authorizing. When authorization is costless ($c = 0$) the principal is indifferent between authorizing the agent and not. Since costly authorization is more realistic we do not dwell on breaking this knife-edge case in a particular way.[20] Overall, when authorizing the agent does not impact policy outcomes and delegation is costly to the principal, she never authorizes the agent to make policy in equilbrium.

The second case is when the agent, if authorized to make policy, receives perfect deference. In this environment the agent will invest effort based on his own motivations. So the principal must decide if it is beneficial for her to allow the agent to make policy given that the agent will have unfettered discretion once authority is transferred. In this case the agent's actions will always obtain if he is authorized and the principal's corresponding incentive compatibility condition that must be

[20]One can also imagine situations in which c could be negative. For instance, if the principal gains by "shifting blame" for policy failures to the agent then one could imagine that even though outcomes will not be appreciably different, the principal gains utility from being able to blame the agent for that failure and avoid external political costs like electoral challenge. The model could be easily extended to incorporate this possibility.

met to authorize is given by,

$$\underbrace{t_A^2}_{\text{Spatial loss}} \leq \underbrace{V_F - V_\varepsilon(\hat{e}_A(\beta,\kappa))}_{\text{Implementation improvement}} - \underbrace{c.}_{\text{Authorization cost}}$$

Intuitively, the principal benefits from authorizing the agent to make policy in this environment if the agent is not too biased. Specifically, the spatial losses associated with delegating authority to the agent must be outweighed by the implementation improvement induced given that the agent will always invest effort based on his own motivations, $\hat{e}_A(\beta,\kappa)$, less the costs of authorization. The likelihood this condition is met and the principal benefits from agent authorization is unambiguously decreasing in agent bias t_A since this has no bearing on the agent's equilibrium effort investment. Further, because this effort level is invariant to agent bias, the likelihood that this condition will be met is increasing in the agent's intrinsic policy motivations β and the volatility of unregulated outcomes V_F, and decreasing in effort and authorization costs, κ and c respectively.

Substantively, this highlights the fact that when oversight is ineffective at strengthening agent effort incentives, the principal benefits from delegation based solely on agent and policy-environmental characteristics. If the agent is highly motivated, or if effort costs are low, perhaps due to simple or mundane policy tasks, then it is more likely that delegation is beneficial. However, if the policy environment is relatively stable without regulation or the agent is extremely biased, perhaps through a process like agency capture, then it is unlikely that the principal benefits from delegation even with a formal institutional "check" like oversight in place.

The invariance of agent effort investments in these two scenarios, in which oversight does not strengthen effort incentives, has clear implications for the instrumental value of authorizing a biased agent from the principal's perspective, captured by the following proposition.

Proposition 3. *If the agent will always be overturned or the overseer is perfectly deferential following delegation, the principal never benefits from a biased agent relative to an ally agent.*

In the environments in which the agent will always be overturned if he is authorized to make policy, agent bias has no impact on principal utility. Regardless of the agent's bias, policy

outcomes are the same: unregulated outcomes will obtain. Therefore, the only thing that impacts the principal's payoff is the cost of authorization. In environments where the overseer is perfectly deferential, a biased agent strictly decreases the principal's utility. While there are cases where the principal benefits from authorizing a positively biased agent, it is strictly better for the principal if the agent is an ally. Since the agent's effort investment is invariant to his bias, the principal can only lose utility from positive bias as it only increases the spatial policy losses associated with agent-made policy with no corresponding effort benefits. Thus, even if delegating policymaking authority is desirable, the principal never benefits from a biased agent relative to an ally.

Now consider the most interesting case when the agent, if authorized, faces conditional-deference oversight. In this case, the environment is characterized by intermediately biased agents (relative to the overseer) in which equilibrium effort investments are at the overseer's threshold ($e_A^{\max}(t_A) \geq \underline{e}_R(t_A)$). The agent, if authorized, will invest effort equal to $\underline{e}_R(t_A)$ and be upheld by the overseer. This, combined with the reversion utility of not authorizing the agent, implies the following net expected payoff for the principal given agent authorization,

$$\Delta U_P(a = 1; r^*(\underline{e}_R(t_A)) = 0) = -t_A^2 - V_\varepsilon(\underline{e}_R(t_A)) - c + V_F.$$

Since the agent will be upheld for investing effort exactly at the overseer's threshold, the principal incurs the spatial policy losses associated with an agent with bias t_A, but gains as the agent's associated effort investment improves implementation quality relative to the volatility of unregulated outcomes. Now, since we know from the agent-overseer subgame that the agent will make the overseer indifferent, we can reduce this net expected payoff by substituting the value of $V_\varepsilon(\underline{e}_R(t_A))$ when the overseer's incentive compatibility condition (equation 2) holds with equality. This reduces the principal's net payoff in this environment to,

$$\Delta U_P(a = 1; r^*(\underline{e}_R(t_A)) = 0) \quad = \quad -2t_A t_R - c.$$

Incentive compatibility implies that the principal will authorize the agent to make policy if,

$$-2t_A t_R \geq c.$$

If authorization costs are positive, $c > 0$, then the principal can only benefit from empowering the agent to make policy if the agent and overseer are on opposite sides of her (i.e., t_A and t_R are oppositely signed). Since by assumption $t_R < 0$ this means that if the principal benefits from delegation at all then the agent is positively biased on the opposite side of the principal than the overseer: $t_A > 0$. If authorization is costless then it is possible that the principal can benefit from delgating to an ally agent. However, even in that case the principal's utility is increasing in agent bias. In this environment, the only time the principal benefits from delegating to an ally rather than a biased agent is when authorization is costless and there is a knife-edge ideal point arrangement in which if the agent were positively biased at all oversight would become too stringent and the agent would revert to investing zero effort and being reversed. Otherwise, the principal always prefers a positively biased agent. This leads to the result characterizing when politicized policymaking is instrumentally valuable to the principal.

Proposition 4. *If the agent will invest the threshold level of effort required by the overseer following delegation, and authorization costs are positive, then the principal benefits from a biased agent relative to an ally anytime she benefits from delegating policmaking authority.*

Propositions 3 and 4 provide the basis for the main theoretical insights of this paper. When oversight is ineffective at strengthening agent incentives, agent bias is only detrimental to political principals. However, when oversight is effective at providing positive incentives for agent policymaking, the principal would prefer to have a biased agent to continue to strengthen these incentives. That is, agent effort incentives are increasingly strengthened the more effective oversight is *and* the more biased the agent. In this way, the principal instrumentally prefers to trade off biased content of policy for reduced slack in implementation so long as oversight is an effective institutional check on agent behavior. By pitting a biased agent against a biased overseer, in particular having an agent

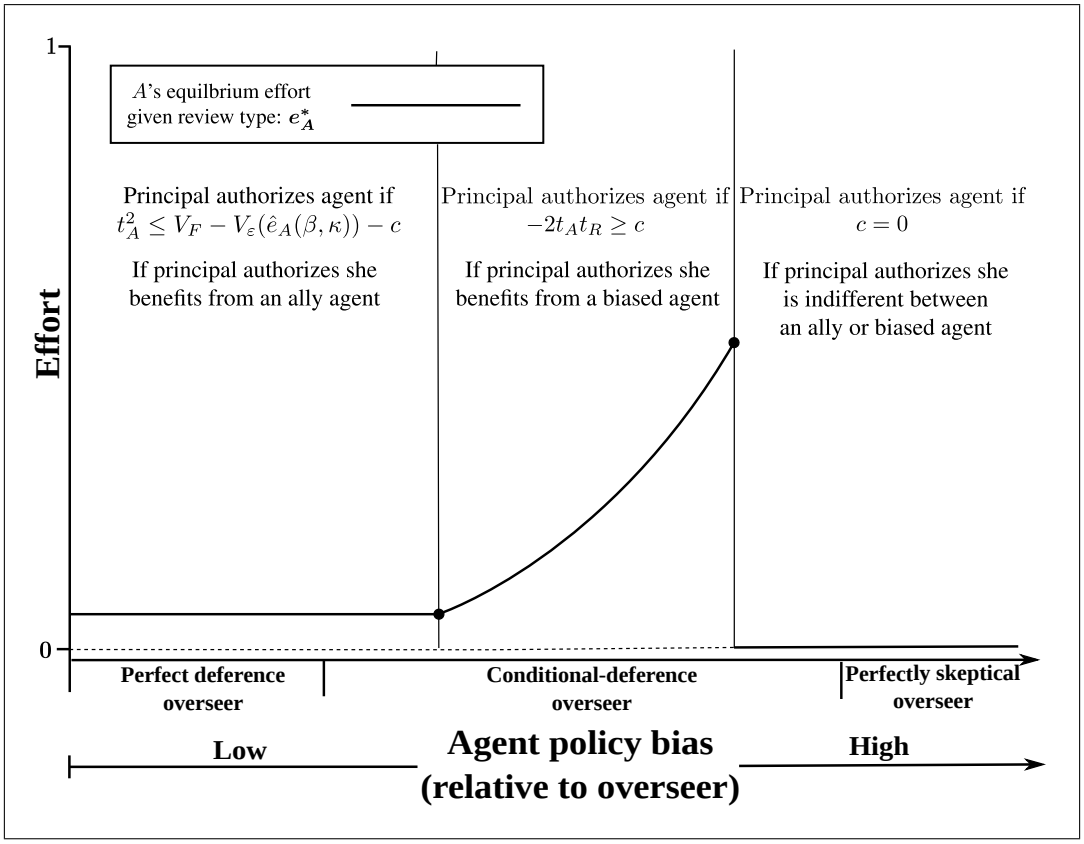


Figure 2: An Example of Equilibrium Authorization and the Instrumental Value of Agent Bias Conditional on Oversight Environment

oppositely biased from the overseer, the principal can benefit from the increased precision induced through agent effort investments. This is true anytime oversight has a positive impact on agent incentives and the principal would benefit from having an agent make policy at all.

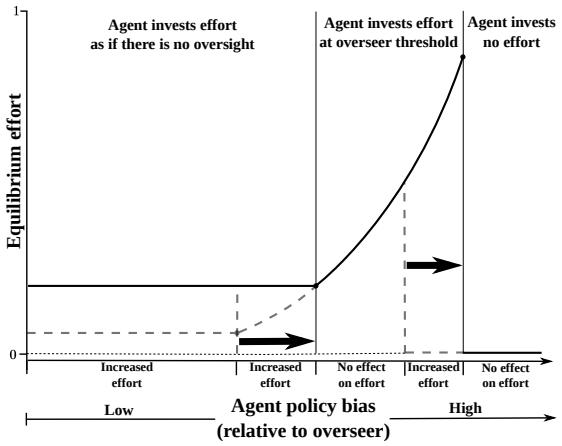
Figure 2 provides a graphical representation of the intuition underlying propositions 3 and 4 using the example equilibrium effort investments from figure 1. The axes are the same as in figure 1, but in this case only equilibrium effort investment is graphed. When the agent will always be upheld his effort is unresponsive to increasing bias and therefore the principal is only harmed by increased agent bias; she prefers an ally agent. On the other extreme, when the agent is too biased relative to the overseer so that he will always be overturned, positive effort investments never occur in equilibrium. In this case, the principal again derives no benefit from a biased agent. These two cases capture the principal's incentives under the environments in proposition 3. However, when

the agent is intermediately biased relative to the overseer, he invests effort that exactly matches the overseer's threshold. In this case, equilibrium effort is increasing in agent bias until the point at which he becomes too biased. In this case, if the principal benefits from delegating then she also benefits from positive agent bias relative to an ally, as in proposition 4. These insights provide several empirically relevant implications for bureaucratic politics.

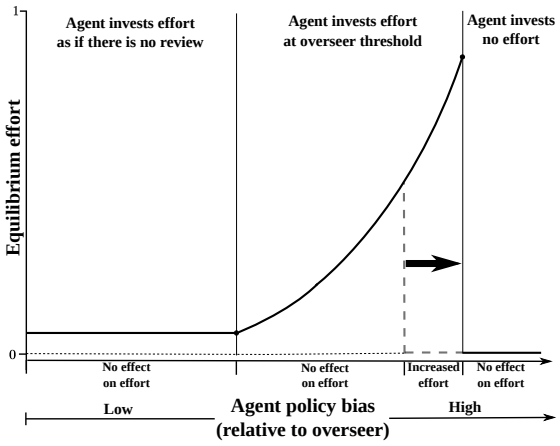
5 Empirical implications

In this section we apply the insights of the model to bureaucratic politics. We focus on two comparative statics of interest and discuss how they relate to different aspects of bureaucratic politics: increased intrinsic policy motivation, β, and increased reversal aversion, π. In both cases, aggregate net levels of equilibrium effort investment increase, but the positive relationship is conditional on what type of oversight is induced. Figure 3 displays examples of these intuitions graphically. In both graphics the gray dashed lines denote previous levels of equilibrium effort investments prior to parameter increases. The black solid lines denote the equilibrium effort investments following the increases. Ultimately, the figures illustrate how the impact of these parameter shifts depend on how agent bias (increasing along the x-axis) interacts with oversight.

First, consider a case in which agent policy motivations, β, increase, illustrated in figure 3a. This initially seems unambiguously positive in that it will generally produce a net increase in aggregate effort investments toward implementation quality. However, the relationship is conditional on how oversight impacts agent incentives. When the agent is ideologically close to the overseer oversight does not increase the agent's effort investment. However, the agent's policy motivations do increase $\hat{e}_A(\beta, \kappa)$ and therefore, effort investments increase proportional to the increase in β. This also expands the range of agent biases in which the agent invests as if there is no oversight. Once the agent becomes moderately biased, oversight does become stringent enough to induce the agent to increase his effort investments to be upheld. The increase in β, while it does increase the maximum level of effort the agent *would be willing to invest*, does not effectively alter observed investment levels. However, by increasing $e_A^{\max}(t_A)$, increased policy motivations expand the range of agents



(a) Equilibrium Effort for Increased β



(b) Equilibrium Effort for Increased π

Figure 3: Examples of Comparative Statics for Increased Policy Motivations and Reversal Aversion

that find it incentive compatible to invest sufficient effort to be upheld. These shifts in the range of agent biases in which sufficient effort is invested follows from the fact that increasing β strengthens agent effort incentives but does *not* affect the stringency of oversight. More biased agents now find it beneficial to invest sufficient effort to avoid reversal than under lower levels of policy motivations. This further implies that the principal can benefit from a larger range of more extreme agent biases. Thus, there is a positive correlation between agent policy motivations and agent bias in terms of principal gains from delegation. Finally, the effort investment levels of extremely biased agents remain unaffected and those agents invest zero effort and accept being overturned.

Now consider what happens as an agent becomes more averse to being overturned, illustrated in figure 3b. The impact of doing so is similar to increasing policy motivations in that from a net perspective, effort investments increase, but they are again conditional on the relationship between oversight and agent bias. When agents are ideologically proximate to the overseer, effort investments remain unchanged. This is because $\hat{e}_A(\beta, \kappa)$ does not respond to changes in reversal aversion since there is no risk of being overturned. However, the maximum level of effort the agent is willing to invest to be upheld, $e_A^{\max}(t_A)$, does increase in π while the stringency of oversight does not. Thus, the range of intermediately biased agents that will now invest sufficient effort to be upheld expands as in the previous case. Higher biased agents now switch from investing zero effort and accepting reversal

to investing sufficient effort to be upheld. Once again, extremely biased agents still find it incentive incompatible to invest any positive effort and continue to invest no effort. Thus, strengthening an agent's aversion to being overturned will increase observed equilibrium effort investments, but only for a small range of agent biases. Agent reversal aversion and agent bias are complementary. An increase in aversion increases the maximal agent bias the principal can benefit from.

Taken together, these comparative statics predict positive correlations between effort investments and increased policy motivations and reversal aversion within agencies. However, these relationships are conditioned by the fact that these increases only 'work' at increasing effort for particular ranges of agent biases. In both cases the principal can benefit from a larger range of more extreme agent biases than before. Since the principal's utility is increasing in agent bias when oversight strengthens effort incentives (the intermediate case), increasing agent policy motivations and reversal aversion increase the level of biases that benefit the principal. We now turn to applying these insights to particular situations in bureaucratic politics.

One of the most important, and most difficult, tasks a president faces is staffing top positions in the federal bureaucracy (Waterman 1989). It is estimated that presidents must staff approximately 4,000 such positions upon taking office (Lewis 2008, 2011). The theory developed here, while appointments were not modeled explicitly, provides insight into what types of appointees can benefit presidents conditional on the nature of the larger institutional environment, e.g., the nature of oversight. Propositions 3 and 4 have clear implications for how presidents can leverage the institutional system in various ways to provide strong incentives for increased policy quality.

First, if the overseer is conceived of as an external interest group, for instance, then our theory's implications are generally in line with the findings of Bertelli and Feldmann (2007). Appointing a biased agent to offset the interest group's biases can be beneficial insofar as the interest group serves as a fire alarm for the legislature. The divergence between the interests of the group and those of the agency can induce higher quality policies overall through the group's threat of "sounding the alarm" (McCubbins and Schwartz 1984). The theoretical insights also speak to presidential appointments across institutions within the Executive branch. The president can simultaneously make

appointments to direct agency policymaking (by appointing directors, secretaries, etc.) and to shape the nature of oversight (by appointing the head of the OIRA, for example). By appointing an agency head that is oppositely biased from the OIRA director the president can put pressure on the agency to more adequately justify policy choices and provide evidence that it is well equipped to implement policies effectively. In particular, the president ought to appoint an agency head that is more pro-regulation (anti-regulation) and an overseer that is more anti-regulation (pro-regulation) than herself to induce the highest effort investments. Moreover, the comparative statics described above suggest that appointing "zealots" that are highly policy motivated, while simultaneously strengthening the role of oversight, actually increases the level of agency bias that the principal would prefer. Overall, the results provide an instrumental rationale for why an executive might optimally choose to appoint subordinates that do not share her substantive or ideological views.

Lewis (2011) suggests that Presidents benefit from appointing ideologically distinct agency heads when these appointees have difficulty affecting agency policy outputs in less ideologically friendly agencies (54-55). For example, suppose the EPA is largely staffed with pro-regulatory (e.g., "careerist") bureaucrats that seek to implement stringent environmental protection regulation, above and beyond what the President would prefer. It may be difficult for the EPA director to fully temper policy output and direct it back toward less stringent regulation. In this instance, our theory suggests that appointing an agency head as a "policy gatekeeper" that prefers less stringent regulation than the President will induce subordinate bureaucrats within the agency to produce higher quality regulatory interventions than if they were led by someone that shared their enthusiasm for stringent regulation. More generally, the results suggest that intra-agency conflict in the form of institutionalized gate-keepers or veto points can strongly incentivize bureaucrats to work harder than they otherwise would in order to increase the probability that their policy goals are realized (Feldman 1989). The theory provides an instrumental rationale for bureaucratic organization that promotes a particular type of "internal conflict" in regulatory agencies (West 1988).

The theory also has implications for the efficacy of managerial motivational strategies. If altering agency bias is prohibitively costly then a savvy principal may wish to attempt to strengthen

effort incentives by increasing the policy motivations of bureaucrats or tying stronger penalties to being overturned by overseers, thereby increasing reversal aversion. Increasing policy motivations may be accomplished by streamlining procedures so that there is less "red tape" or strengthening hierarchical authority (Moynihan and Pandey 2007), increasing the ratio of zealots to slackers (Gailmard and Patty 2007), or enhancing agencies' commitment to mission through staffing or other means (Wilson 1989). Tying oversight outcomes more strongly to agency budgets, promotional decisions, or the like may allow a principal to increase a bureaucrat's aversion to being overturned. Both strategies will be effective at increasing net levels of observed effort, but the comparative statics point out important qualifications predicated on the policymaking environment.

The parameter denoting agent policy motivations, β, intuitively captures the effect(s) of increasing intrinsic policy motivations. As figure 3a illustrates, the efficacy of this managerial strategy is conditional on the institutional environment the agency must navigate. It is a strategy that ought to produce net benefits with respect to strengthening effort incentives for agencies that are either moderate relative to the overseer or intermediately biased. In particular, increasing a moderate agency's motivations can serve as a substitute when oversight is ineffective. A larger range of moderate-biased agencies are unaffected by oversight, but their effort investments still increase since their policy motivations increased. The strategy will be ineffective for a middle range and high range of agency biases, but for a range of agencies that were once deterred from investing effort, their investments increase dramatically with an increase in policy motivations. Counter-intuitively, this implies that when a manager wishes to increase the motivations of her subordinates, she would, if given the choice, actually prefer them to become more biased as well since doing so would intensify the effects of the motivational strategy itself. Overall, a managerial strategy of this sort will not always impact observed output, but it can still be used selectively quite effectively.

Similarly, if a principal attempts to strengthen the role of oversight through increasing an agency's reversal aversion, net effort increases. However, this strategy does not work when the agency or bureaucrat has interests that are closely aligned with the overseer. The only increase in effort comes by inducing agencies that once found it incentive incompatible to invest effort to

begin investing high levels of effort to pass muster in ex post review. Put another way, strengthening oversight penalties of policymaking agents is only effective when the agents are biased enough away from their potential overseers. Without a sufficient level of divergence the overseer cannot commit to requiring more from the agent. Even though the agent may be more averse to being overturned once a motivational strategy of this sort is applied, that aversion is inconsequential if the overseer cannot credibly commit to sanctioning the agent.[21]

6 Conclusion

In this paper, we developed a theory of delegation and showed that political principals — Presidents, legislatures, agency leaders — can benefit from authorizing biased agents to make policy on their behalf. This potential benefit is due to the recognition that policymakers both craft the substance of policy and invest effort to implement those policies effectively. Due to this duality in policymaking the principal benefits from pitting a biased agent, with full policymaking discretion, against an oppositely biased overseer, empowered to reverse the agent's actions if insufficient effort is invested toward improving outcomes. Institutionalized oversight is only effective as a means for strengthening incentives if the agent is biased, and leveraging agent bias to induce effort is only a viable route to improve outcomes if oversight is an effective means of political control. The characteristics of the agent, the policy environment, and the dynamics of political oversight introduce both opportunities and constraints for principals interested in promoting strong effort incentives for agents they will authorize to make policy on their behalf. The model is flexible enough to be extended to include other important determinants of output such as interest group participation, oversight by multiple institutions, and allocation of policymaking tasks across multiple agents. This paper represents a step toward a fuller understanding of how ubiquitous processes, like bureaucratic policymaking in the shadow of oversight, impact the dynamics of political decisions like personnel staffing and appointments, agency design, and the efficacy of managerial motivational strategies.

[21] These effects are consistent with theories of institutional determinants of public service motivation (see Moynihan and Pandey 2007, for a review).

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A Supplemental Appendix

A.1 Agent-overseer subgame

Agent substantive policy choice.

Lemma 1. *The agent always sets the substantive content of policy at his ideal point:* $x^*(\omega) = \omega + t_A$.

Proof of Lemma 1. To show that the agent always sets policy at his ideal point we show that he is always weakly better off doing so by checking deviations in two cases: (1) when the overseer upholds the agent and (2) when the overseer reverses the agent. In both cases let $\delta > 0$ denote the agent's deviation so that if he deviates $x = \omega + t_A + \delta$.

Case 1: Overseer upholds. The agent's expected utility from setting $x = \omega + t_A$ is given by,

$$U_A(x = \omega + t_A | r = 0) = -\beta V_\varepsilon(e) - \kappa e.$$

The agent's expected utility from deviating to $x = \omega + t_A + \delta$ is given by,

$$U_A(x = \omega + t_A + \delta | r = 0) = -\beta(\delta^2 + V_\varepsilon(e)) - \kappa e.$$

These combine to give the agent's net expected payoff from deviating:

$$\Delta U_A(x = \omega + t_A + \delta | r = 0) \quad = \quad -\beta\delta^2.$$

Since $\beta > 0$ and $\delta > 0$ the agent is strictly worse off from deviating.

Case 2: Overseer reverses. The agent's expected utility from setting $x = \omega + t_A$ is,

$$U_A(x = \omega + t_A | r = 1) = -\beta(t_A^2 + V_F) - \pi.$$

The agent's expected utility from deviating by δ is given by,

$$U_A(x = \omega + t_A + \delta | r = 1) = -\beta(t_A^2 + V_F) - \pi.$$

Since the outcome is the same in either case following reversal the agent's net expected payoff from deviating is simply 0. Having shown that the agent gains nothing from deviating from the posited equilibrium strategy of sincere policymaking in both cases, the result follows. ■

Optimal oversight.

Lemma 2. *In equilibrium, the overseer plays the following best response strategy,*

$$s_R^*(e) = \begin{cases} \textit{uphold: } r = 0 & \textit{if } e \geq \underline{e}_R(t_A), \\ \textit{reverse: } r = 1 & \textit{otherwise,} \end{cases}$$

Proof of Lemma 2. First, consider the overseer's subjective expected utility for overturning the agent,

$$\begin{aligned} U_R(r = 1; \rho_{-R}) &= -(y - t_R)^2 \\ &= -\mathbb{E}[\omega - t_R]^2 - V[\omega], \\ &= -t_R^2 - V_F. \end{aligned}$$

Now, consider the overseer's subjective expected utility for upholding the agent,

$$\begin{aligned} U_R(r = 0; \rho_{-R}) &= -(y - t_R)^2, \\ &= -(x^*(\omega) - \omega + \varepsilon - t_R)^2, \\ &= -\mathbb{E}[x^*(\omega) - \omega - t_R]^2 - V[x^*(\omega) - \omega - t_R] - \mathbb{E}[\varepsilon | e]^2 - V[\varepsilon | e], \\ &= -(t_A - t_R)^2 - V_\varepsilon(e). \end{aligned}$$

Define $\Delta U_R(r = 0; \rho_{-R}) \equiv U_R(r = 0; \rho_{-R}) - U_R(r = 1; \rho_{-R})$ as the overseer's net expected utility for

upholding. Then we have,

$$\begin{aligned}\Delta U_R(r=0;\rho_{-R}) &= -(t_A-t_R)^2 - V_\varepsilon(e) + t_R^2 + V_F, \\ &= -t_A^2 + 2t_A t_R - V_\varepsilon(e) + V_F.\end{aligned}$$

Incentive compatibility implies that the overseer will uphold if and only if $\Delta U_R(r=0;\rho_{-R}) \geq 0$. Thus we have,

$$-t_A^2 + 2t_A t_R - V_\varepsilon(e) + V_F \quad \geq \quad 0.$$

Rearranging we have:

$$V_F - V_\varepsilon(e) \quad \geq \quad t_A^2 - 2t_A t_R, \tag{A.7}$$

as is presented in-text in equation 2. The increase in implementation quality on the LHS must outweigh the net spatial policy losses based on divergent ideal points on the RHS. Now, by incentive compatibility the overseer's threshold level of required effort investment to uphold the agent is defined as $\underline{e}_R(t_A) \equiv e$ such that equation A.7 holds with equality given agent bias t_A, assuming such an e exists. ■

Agent effort investments.

Lemma 3. *Define* $e_A^{\max}(t_A) = \max\left[\min\left[\frac{\beta(t_A^2+V_F-V_\varepsilon(e_A^{\max}(t_A)))+\pi}{\kappa}, 1\right], 0\right]$. *The agent will never invest effort higher than* $e_A^{\max}(t_A)$ *to be upheld by the overseer.*

Proof of Lemma 3. When the agent faces a conditional-deference overseer his net expected utility from investing the threshold level of effort required to be upheld is given by,

$$\Delta U_A(e \geq \underline{e}_R(t_A);\rho_{-A}) = \beta(t_A^2 + V_F - V_\varepsilon(e)) - \kappa e + \pi.$$

Thus, the agent will invest this level of effort if and only if $\Delta U_A(e \geq \underline{e}_R(t_A);\rho_{-A}) \geq 0$. Solving the

expression with equality for e gives the maximum level of effort the agent would be willing to invest given t_A in order to be upheld (by incentive compatibility):

$$e = \frac{\beta(t_A^2 + V_F - V_\varepsilon(e)) + \pi}{\kappa}. \tag{A.8}$$

The RHS of Equation A.8 can fall below 0 and rise above 1. So to ensure an effort investment always exists further define:

$$e_A^{\max}(t_A) = \max\left[\min\left[\frac{\beta(t_A^2 + V_F - V_\varepsilon(e_A^{\max}(t_A))) + \pi}{\kappa}, 1\right], 0\right].$$

Given this formulation, $e_A^{\max}(t_A)$ always exists. The RHS of equation A.8 is continuous over the interval $[0,1]$. So, either $e_A^{\max}(t_A)$ is on a boundary or there is an interior solution, which is implied by (continuity and) the Intermediate Value Theorem. ■

Lemma 4. *In equilibrium, the agent invests effort according to the following strategy,*

$$s_A^{e*} = \begin{cases} \hat{e}_A(\beta,\kappa) & \text{if } \hat{e}_A(\beta,\kappa) \geq \underline{e}_R(t_A), \\ \underline{e}_R(t_A) & \text{if } \hat{e}_A(\beta,\kappa) < \underline{e}_R(t_A) \text{ and } e_A^{\max}(t_A) \geq \underline{e}_R(t_A), \\ 0 & \text{if } \hat{e}_A(\beta,\kappa) < \underline{e}_R(t_A) \text{ and } e_A^{\max}(t_A) < \underline{e}_R(t_A), \end{cases}$$

where $\hat{e}_A = \arg\max_e -\beta V_\varepsilon(e) - \kappa e$, $\underline{e}_R(t_A) \equiv e$ *such that* $V_F - V_\varepsilon(e) = (t_A - t_R)^2 - t_R^2$, *and* $e_A^{\max}(t_A) = \max\left[\min\left[\frac{\beta(t_A^2 + V_F - V_\varepsilon(e_A^{\max}(t_A))) + \pi}{\kappa}, 1\right], 0\right]$.

Proof of Lemma 4. To verify that these are best responses for the agent we need to check three cases: (1) the overseer always upholds ($\hat{e}_A(\beta,\kappa) \geq \underline{e}_R(t_A)$); (2) the overseer always overturns ($\hat{e}_A(\beta,\kappa) < \underline{e}_R(t_A)$ and $e_A^{\max}(t_A) < \underline{e}_R(t_A)$); (3) the overseer upholds if and only if the agent invests effort high enough, which is higher than the agent would invest absent oversight ($\hat{e}_A(\beta,\kappa) < \underline{e}_R(t_A)$ and $e_A^{\max}(t_A) \geq \underline{e}_R(t_A)$). These cases are defined by the overseer's best response in Lemma 2 and the maximum effort investment the agent is willing to make to be upheld in Lemma 3.

Overseer always upholds (perfectly deferential). The agent's expected payoff given he will be upheld is given by,

$$\begin{aligned} U_A(e|r=0) &= -\beta(\mathbb{E}[\varepsilon]^2 + V_\varepsilon(e)) - \kappa e, \\ &= -\beta V_\varepsilon(e) - \kappa e. \end{aligned}$$

The agent seeks to maximize $U_A(e|r=0)$ with his effort choice, which implies the following effort investment,

$$\hat{e}_A(\beta,\kappa) \in \arg\max_e -\beta V_\varepsilon(e) - \kappa e.$$

Moreover, $\hat{e}_A(\beta,\kappa)$ exists since it is the maximum of a continuous function on a compact set and is unique so long as $V_\varepsilon(e)$ is strictly monotone.

Overseer always overturns (perfectly skeptical). To see why the agent never invests positive effort in an environment in which he will always be reversed note that the agent's expected payoff for investing positive effort given he will be overturned is:

$$U_A(e>0|r=1) = -\beta(t_A^2 + V_F) - \kappa e - \pi.$$

The agent's expected payoff from investing no effort given he will be overturned is:

$$U_A(e=0|r=1) = -\beta(t_A^2 + V_F) - \pi.$$

These combine to give the agent's net expected payoff from investing positive effort given that he will be reversed by the overseer,

$$\begin{aligned} \Delta U_A(e>0|r=1) &= -\beta(t_A^2 + V_F) + \beta(t_A^2 + V_F) - \kappa e - \pi + \pi, \\ &= -\kappa e. \end{aligned}$$

Thus, if the agent invests positive effort when he will be reversed he simply pays the cost for that effort, and, therefore, optimally invests zero effort.

Conditional-deference overseer. In this environment $\hat{e}_A(\beta,\kappa) < \underline{e}_R(t_A)$ so the agent is constrained by the overseer. The agent compares his expected utility from investing the threshold level of effort and being upheld by the overseer and his expected utility from investing zero effort and being overturned. These expected payoffs are given by the following expressions, respectively:

$$\begin{aligned} U_A(e=\underline{e}_R;\rho_{-A}) &= -\beta V_\varepsilon(\underline{e}_R) - \kappa \underline{e}_R, \\ U_A(e=0;\rho_{-A}) &= -\beta(t_A^2 + V_F) - \pi. \end{aligned}$$

These combine to give the net expected payoff for investing the threshold level of effort (and being upheld rather than overturned):

$$\begin{aligned} \Delta U_A(\underline{e}_R;\rho_{-A}) &= -\beta V_\varepsilon(\underline{e}_R) - \kappa \underline{e}_R + \beta(t_A^2 + V_F) + \pi, \\ &= \beta(t_A^2 + V_F - V_\varepsilon(\underline{e}_R)) - \kappa \underline{e}_R + \pi. \end{aligned} \tag{A.9}$$

Equation A.9 gives the agent's incentive compatibility condition for investing the threshold level of effort, $\underline{e}_R(t_A)$, rather than $e=0$ and being overturned. As long as this condition is weakly greater than zero the agent, in weakly undominated strategies, will invest the threshold level of effort to be upheld when constrained by the overseer. ■

Proposition 1. *Suppose the agent is authorized to make policy by the principal. Then a perfect Bayesian equilibrium of the agent-overseer subgame is characterized by the following collection of strategies,*

1. *The agent makes effort investments according to s_A^{e*}, given by equation 6,*
2. *The agent always sets policy at his ideal point, $x^*(\omega) = \omega + t_A$,*
3. *The overseer makes review decisions according to $s_R^*(e)$, given by equation 3,*

Proof of Proposition 1. This follows from a straightforward combination of lemmas 1, 2, 3, and 4. Lemmas 3 and 4 yield number 1 in the proposition, lemma 1 yields number 2, and lemma 2 yields number 3. ■

Proposition 2. *In equilibrium, agent bias strengthens agent effort investment incentives if and only if oversight also strengthens these incentives.*

Proof of Proposition 2. This follows from the fact that neither agent bias t_A nor the agent's aversion to being overturned π appear in equation 4, but both t_A and π appear in the agent's effort investment given by equation 5. ■

A.2 Principal decision-making

Lemma 5. *When the agent will always be overturned by the overseer if he is authorized by the principal, the principal authorizes the agent to make policy if $c = 0$.*

Proof of Lemma 5. This follows from incentive compatibility for the principal to authorize the agent when he will always be overturned by the overseer. First, the principal's subjective expected payoff for not authorizing the agent is simply,

$$\begin{aligned} U_P(a=0;r=1,e^*) &= -y^2 - ca, \\ &= -\mathbb{E}[\omega]^2 - V[\omega] - c(0), \\ &= -V_F. \end{aligned}$$

Now, since if the principal authorizes the agent he will get overturned the policy payout is the same but she must incur c. So, her subjective expected payoff from authorizing an agent in this environment is given by,

$$U_P(a=1;r=1,e^*) = -V_F - c.$$

Combining these two expected payoffs yields the principal's net expected payoff for authorizing the

agent when the overseer is perfectly skeptical and is given by $\Delta U_P(a=1;r=1) = U_P(a=1;r=1) - U_P(a=0)$:

$$\begin{aligned}\Delta U_P(a=1;r=1) &= -V_F - c + V_F, \\ &= -c.\end{aligned}$$

Incentive compatibility implies that the principal, given her net expected payoff for doing so, will only authorize the agent to make policy when the overseer will overturn with certainty if $\Delta U_P(a=1;r=1) \geq 0$, which requires that $-c \geq 0$, or, equivalently, $c \leq 0$. Since $c \geq 0$ by assumption, the principal only delegates if $c = 0$, as stated in the result. ■

Lemma 6. *When the agent will be upheld with certainty if authorized to make policy the principal authorizes the agent to make policy if* $t_A^2 \leq V_F - V_\varepsilon(\hat{e}_A(\beta,\kappa)) - c$.

Proof of Lemma 6. This follows from incentive compatibility for the principal to authorize the agent when the agent will always be upheld. First, the principal's subjective expected payoff when she does not authorize the agent to make policy is again,

$$U_P(a=0) = -V_F.$$

Similarly, given that the principal knows that if she authorizes the agent to make policy then $x^*(\omega) = \omega + t_A$ and $e^* = \hat{e}_A(\beta,\kappa)$, her subjective expected payoff for authorizing the agent to make policy in this environment is given by,

$$\begin{aligned}U_P(a=1;r=0,e^*=\hat{e}_A(\beta,\kappa)) &= -t_A^2 - \mathbb{E}[\varepsilon|e^*]^2 - V[\varepsilon|e^*] - c, \\ &= -t_A^2 - V_\varepsilon(\hat{e}_A(\beta,\kappa)) - c.\end{aligned}$$

Combining these expected payoffs yields the principal's net expected payoff, defined as $\Delta U_P(a=$

$1; r = 0, \hat{e}_A(\beta, \kappa)) = U_P(a = 1; r = 0, e^* = \hat{e}_A(\beta, \kappa)) - U_P(a = 0)$:

$$\Delta U_P(a = 1; r = 0, \hat{e}_A(\beta, \kappa)) \quad = \quad -t_A^2 - V_\varepsilon(\hat{e}_A(\beta, \kappa)) - c + V_F.$$

Incentive compatibility implies that the principal will authorize the agent if and only if $\Delta U_P(a = 1; r = 0, \hat{e}_A(\beta, \kappa)) \geq 0$, which requires that,

$$\begin{aligned} -t_A^2 - V_\varepsilon(\hat{e}_A(\beta, \kappa)) - c + V_F &\geq 0, \\ V_F - V_\varepsilon(\hat{e}_A(\beta, \kappa)) - c &\geq t_A^2, \end{aligned}$$

as stated in the lemma. ■

Proposition 3. *If the agent will always be overturned or the overseer is perfectly deferential following delegation, the principal never benefits from a biased agent relative to an ally agent.*

Proof of Proposition 3. First, we consider the case in which the agent, if authorized, will be overturned by the overseer with certainty. From lemma 5, the principal's net expected utility for authorizing the agent is given by,

$$\Delta U_P(a = 1; r = 1) \quad = \quad -c.$$

Since t_A does not appear in the principal's net expected utility, even if the principal benefits from empowering the agent (which *may* be the case when $c = 0$) she does not benefit from a biased versus an ally agent.

Now we consider the second case: authorizing an agent that will receive perfect deference. Recall that if authorized, since the overseer will always uphold regardless of agent effort investment, the agent invests effort $\hat{e}_A(\beta, \kappa)$. From lemma 6, the principal's net expected payoff from authorizing the agent is given by,

$$\Delta U_P(a = 1; r = 0, \hat{e}_A(\beta, \kappa)) \quad = \quad -t_A^2 - V_\varepsilon(\hat{e}_A(\beta, \kappa)) - c + V_F.$$

Straightforward inspection of this net payoff reveals that the principal's utility is decreasing in agent bias $|t_A|$. As agent bias increases, the principal's utility decreases since no other component of her net expected utility is affected by changes in t_A. Thus, anytime the principal benefits from delegating to an agent that will face perfect deference oversight, she strictly prefers an ally to biased agent. ■

Lemma 7. *Suppose the agent, if authorized, will invest effort sufficient to be upheld by the overseer. Further, suppose agent and overseer ideal points are organized such that the agent faces a conditional-deference overseer. Then the principal authorizes the agent to make policy if* $-2t_A t_R \geq c$.

Proof of Lemma 7. This follows from incentive compatibility for the principal to authorize the agent to make policy when facing a conditional-deference overseer. Note first that we are assuming that if the principal authorizes the agent to make policy then the agent will invest effort equal to the overseer's threshold $\underline{e}_R(t_A)$ and be upheld. The principal's subjective expected payoff if she does not authorize the agent is again,

$$U_P(a=0) = -V_F.$$

Now, given that the principal knows that if she authorizes the agent to make policy the agent will invest effort $e^* = \underline{e}_R(t_A)$, her subjective expected payoff for authorizing the agent is given by,

$$\begin{aligned} U_P(a=1; r=0, e^* = \underline{e}_R(t_A)) &= -(x^*(\omega) - \omega + \varepsilon)^2 - c, \\ &= -t_A^2 - \mathbb{E}[\varepsilon|e^*] - V[\varepsilon|e^*] - c, \\ &= -t_A^2 - V_\varepsilon(\underline{e}_R(t_A)) - c. \end{aligned}$$

Define the principal's net expected payoff from authorizing the agent as $\Delta U_P(a=1; r=0, \underline{e}_R(t_A)) = U_P(a=1; r=0, e^* = \underline{e}_R(t_A)) - U_P(a=0)$:

$$\Delta U_P(a=1; r=0, \underline{e}_R(t_A)) = -t_A^2 - V_\varepsilon(\underline{e}_R(t_A)) - c + V_F.$$

Incentive compatibility implies that the principal will authorize the agent to make policy if $\Delta U_P(a =$

$1; r = 0, \underline{e}_R(t_A)) \geq 0$, which requires that,

$$-t_A^2 - V_\varepsilon(\underline{e}_R(t_A)) - c + V_F \quad \geq \quad 0.$$

Now, solving the overseer's incentive compatibility condition to uphold with equality for $V_\varepsilon(e)$ allows us to substitute $V_\varepsilon(\underline{e}_R(t_A))$ as follows:

$$\begin{aligned} -t_A^2 - \left[V_F - t_A^2 + 2t_A t_R\right] - c + V_F &\geq 0, \\ -2t_A t_R &\geq c. \end{aligned}$$

This implies the principal will delegate if and only if $-2t_A t_R \geq c$, as stated in the result. ■

Proposition 4. *If the agent will invest the threshold level of effort required by the overseer following delegation, and authorization costs are positive, then the principal benefits from a biased agent relative to an ally anytime she benefits from delegating policmaking authority.*

Proof of Proposition 4. From lemma 7, if the principal benefits from authorizing the agent to make policy given that he will face conditional-deference oversight then,

$$-2t_A t_R \geq c.$$

First note that since $t_R < 0$ by assumption the principal's utility is increasing in $t_A > 0$. For the inequality to hold it must be that either $t_A > 0$ if $c > 0$ or $t_A \geq 0$ if $c = 0$. In either case, the principal is better off with a positively biased agent, $t_A > 0$, since her utility is increasing in t_A. Thus, anytime the principal benefits from delegating to the agent (i.e., the above inequality holds) the principal also benefits from that agent being positively biased. ■