Reputation and Accountability

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In Partial Fulfillment of the Requirements for the
degree of
Doctor of Philosophy

CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, California

2024
Defended August 4, 2023

For Sean.

ACKNOWLEDGEMENTS

This work would not have been possible without the guidance and encouragement of so many. To the faculty, friends, and family who have made this possible—thank you.

First, I would like to thank my committee: Marina Agranov, Michael Gibilisco, Alexander Hirsch, Jonathan Katz, and Rod Kiewiet. My dissertation chair, Alexander Hirsch, deserves particular recognition for his thorough and deep engagement with this research. I could not have asked for a more attentive and diligent advisor. I am a better scholar for your guidance and mentorship.

I would also like to thank all those who participated in our Wednesday research group meetings over the years: Saba Devdariani, Michael Gibilisco, Joanna Huey, Jacob Morrier, and Yimeng Li. Mike, Joanna, and Jacob, your comments and insights helped transform my job market chapter from inchoate thoughts to a final draft. I have learned so much from seeing your research progress and I cannot wait to how it develops over the years to come.

To my family and friends, I appreciate all of your support. The saying that "it takes a village" is certainly true in my case. My in-laws, Neil and Susan Gailmard, came to our aid so many times with last minute childcare and takeout. Steve and Sandy Hawes opened their home to me during my second and third years. My mom, Lesley Hawes, allowed us to invade her empty-nest and patiently listened as I explained half-formed research ideas. My friend, Anastasia Buyalskaya, was my family away from home.

To Reed and Sophie, thank you for understanding that I work at night. I love you both so much. William, Abby, and Collin—thank you for being quite possibly the most respectful and mellow teenagers ever and thank you for accepting me into your lives.

Last, but by no means least, I would like to thank my husband, Sean Gailmard. I would not have been able to complete this project without your constant support and care. All those miles you drove, the nights you spent coaxing Reed to sleep, the meetings you took with infants and toddlers in tow—all so I could dedicate more time and energy to this endeavor. Most of all, you believed in me when I doubted myself (which was often during that first year).

ABSTRACT

In this thesis, I explore how accountability relationships affect policymaking in two institutional contexts: internal executive branch operations and electoral contests. The overarching insight is that the potential for removal creates reputation concerns to demonstrate skill that, in turn, affect policymaking. For political appointees serving at the pleasure of the president, this means a reputation for management skill or technocratic policy expertise, whereas for elected representatives, this means maintaining a reputation for competent leadership with voters. The main result is that oversight creates both pathological policymaking incentives for accountable officials, but also potentially unintuitive selection by a principal—either the president or voters.

In Chapters 1 and 2, I explore political appointees' dual roles as agents of the president and managers of the bureaucracy. This view of appointee-careerist relations complicates standard notions of presidential control and bureaucratic power, by recognizing that appointees are reliant on presidential support to maintain their position within an administration. To cultivate a good reputation with the president, appointees may cede control to the bureaucracy. However, to understand how control is transferred to the bureaucracy, I argue that we must fully account for appointees' strategic roles in the administrative presidency—and that, to do so, requires differentiating between types of appointments.

Presidential appointments that require Senate confirmation (PAS) and noncareer members of the Senior Executive Service (SES-NA) occupy positions that require direct oversight and management of subordinate career civil servants. As managers, these appointees must rely on the expertise, pragmatic or otherwise, and efforts of bureaucrats to implement the president's policies. I argue that presidents select these appointees primarily on the basis of their management skills. In contrast, Schedule C appointees occupy confidential or policymaking roles and serve directly under a political appointee. These appointees may substitute for the expertise of career bureaucrats. I argue that presidents select these appointees on the basis of policy expertise.

However, central to my argument is the idea that the president may still be uncertain of an appointee's management skill or policy expertise—despite appointing him or her in the first place. This means there is scope for the president to learn about

an appointee's ability based on how they perform or behave on the job. It is this residual uncertainty about an appointee's capabilities, along with the president's formal removal power, that create reputation concerns for appointees: appointees care about maintaining their position and to do so they must preserve their reputation with the president.

I argue that these reputation concerns shape how appointees manage interactions with the bureaucracy. Appointees in managerial roles may make more policy concessions to the bureaucracy than the president would like in order to ensure bureaucratic cooperation and avoid revealing managerial weaknesses. Instead, appointees in positions of policymaking authority may fail to empower or involve bureaucrats in policymaking. Both of these actions undermine the president's policy goals by either creating policies that increasingly reflect the views of the bureaucracy or by failing to create policies that reflect bureaucratic expertise. This suggests limitations of political control over the bureaucracy that cannot be alleviated through the exercise of formal administrative powers, namely appointment and removal powers.

Ultimately, the agency issues I explore in this context follow from a fundamental and immutable constraint on presidential control: the president simply cannot unilaterally manage the executive branch. The demands of the presidency are too great for the president to preside over all operations. This means delegation is necessary— and, even when the president delegates to advisors of "her own choosing," some loss of control is inevitable.

In Chapter 3, I explore how majority selection operates in an environment in which politicians prefer to pursue particularistic policies. If special interest coalitions are sufficiently strong, a majority may expect that political expertise will be used to select policies that generate rents for narrow constituencies at the expense of its own welfare. I develop a model in which a majority prefers to elect the less competent politician in order to undermine the incumbent's ability to pursue the special interest agenda and derive the implications for accountability in this setting. The results demonstrate that the majority's attempts to reassert control over policy through its retention decisions impede social welfare maximizing reform and distort aggregate welfare by either encouraging (i) inefficient policy selection or (ii) inefficient candidate selection. Even if politicians choose policies that maximize social welfare doing so may only worsen aggregate welfare by providing voters with more information about candidate competence, which enables the majority to better select inept politicians.

PUBLISHED CONTENT AND CONTRIBUTIONS

Gailmard, Lindsey (2022). "Electoral Accountability and Political Competence". In: *Journal of Theoretical Politics* 34.2, pp. 236–261. DOI: 10.1177/09516298221081809.

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We wanted our appointees to be the President's ambassadors to the agencies, not the other way around.

Edwin Meese

. . . the President's hardest job is, not to persuade Congress to support a policy dear to his political heart, but to persuade the pertinent bureau or agency or mission, even when headed by men of his own choosing, to follow his direction faithfully and transform the shadow of the policy into the substance of the program.

Clinton Rossiter, *The American Presidency*

INTRODUCTION

> *If the president should possess alone the power of removal from office, those who are employed in the execution of the law will be in their proper situation, and the chain of dependence be preserved; the lowest officers, the middle grade, and the highest, will depend, as they ought, on the president. . .*
>
> James Madison, Annuals of Congress, 17 June 1789

The framers of the Constitution envisioned a tool for accountability that the president alone would wield. As Madison explains, this power would maintain a "chain of dependence" between the president and those charged with execution of the law. This logic predates the development of the modern administrative state.

The extent to which the president is able to maintain political control over the executive branch through the use of formal administrative powers remains an open question—in particular, the extent to which the appointment and removal of officials furthers the president's control.

As the presidency has evolved, so too, have the strategies the president employs to manage executive branch operations. And yet, at the same time, as the demands of the presidency have grown, delegations of authority to intermediary actors are, in some sense, unavoidable. So while the president may be able to better control who she delegates to, she cannot avoid the fact that many tasks must be carried out by others on her behalf.

The Central Argument

In this dissertation, I consider the extent to which the president's formal appointment and removal powers confer control over the executive branch. The exercise of these formal powers is by no means the only way in which the president attempts to control policymaking within the executive. Notably, modern presidents have consolidated control over policymaking within the White House. Yet, appointment and removal of officials is a potent—and highly visible—tool that presidents have used to advance their agendas.

I explore political appointee's dual roles as agents of the president and managers of the bureaucracy. This view of appointee-careerist relations complicates standard notions of presidential control and bureaucratic power, by recognizing that

appointees are reliant on presidential support to maintain their position within an administration. To cultivate a good reputation with the president, appointees may cede control to the bureaucracy. However, understanding how control is transferred to the bureaucracy requires us to fully account for appointees' strategic roles in the administrative presidency.

In what follows, I advance a conception of political appointees as middle managers that both negotiate interactions with bureaucracy on behalf of the president, but also are subject to review and dismissal by the president. The overarching insight is that, for these appointees, how they manage the bureaucrats that report to them influences the president's assessments of their ability either directly or indirectly and, therefore, may create pathological incentives for appointees to relinquish or maintain control—even when doing so undermines the president's policy interests.

By situating management concerns at the center of both presidential appointments and interactions between appointees and the bureaucracy, this view represents a substantively important departure from previous theories of bureaucratic drift. As managers, appointees must balance the policy interests of the president against the views of the bureaucracy to promote bureaucratic compliance, but also must demonstrate skill in their interactions with the bureaucracy. An appointee that faces these reputation concerns may not necessarily use their expertise to further the president's policy interests if doing so jeopardizes their reputation with the president.

Over the last 50 years, in particular, presidents have dedicated more resources to personnel management, both through institutionalizing personnel management in the Presidential Personnel Office (the office that manages transitions and now includes professional recruiters)—but also through their own personal engagement with and oversight of appointees.

This is important because presidents rely on appointees to change public policy in their agencies and exert control the bureaucracy. Scholars have argued that presidential direction of the bureaucracy preserves political control and substantive coherence. This is normatively desirable as bureaucratic legitimacy in a representative government requires that the bureaucracy is responsive to elected officials.

Despite these developments, the appointment process may, nevertheless, fail to identify competent appointees ex ante: the sheer volume of appointments ensures not all appointees have extensive experience in government. In addition, the type of competence necessary to further presidential control varies by position and task. For

instance, James Watt deployed the "rule of three" for assigning lower level political appointees:

> "Into every major subunit of the governmental organization the agency head sends three political appointees. One must have the leadership skills and knowledge necessary to run the bureau. The second must have the knowledge and administrative competence to see that his superior's orders are implemented. The third needs no technical skills at all. His job, while he is learning, is to make sure that the two others remember why they were appointed by the president in the first place!" (Devine 1991 p. 130)

Ultimately, however, the extent to which appointees are able to generate presidential control over the bureaucracy is limited precisely because appointees are strategic intermediaries and occupy a strategic role in the administrative presidency.

Dissertation Plan

This dissertation is structured as follows. In Chapter 1, I discuss policymaking by managers that are also responsible for motivating career bureaucrats to implement administrative actions. These appointees often know more about their organizations than the president and, therefore, may be better positioned to generate bureaucratic support for the president's agenda. Yet bureaucratic cooperation may be easier for appointees to sustain the more policy reflects the views of careerists tasked with implementation.

In Chapter 2, I develop a model in which the president is uncertain of an appointee's expertise, and infers it from the allocation of decision-making authority between the appointee and bureaucrat. I demonstrate that the threat of removal leads appointees to avoid delegations of authority to better-informed bureaucrats in order to appear more expert. In equilibrium, less expert appointees more aligned with the president face greater incentives to determine policy themselves to avoid damaging their reputation. By selecting non-ally appointees the president commits to sometimes dismiss even experts which improves her control over policymaking.

Finally, in Chapter 3, I present a model of electoral contests in which politicians have incentives to pursue special interest policies. This changes the benefit of political competence to the majority—who prefer policies at odds with the minority.

As political competence enables politicians to more effectively target policy benefits to the minority—at the expense of the majority—the majority prefers to elect less competent representatives. This leads to two forms of distortions: inefficient policymaking and inefficient candidate selection.

Chapter 1

APPOINTEES AS MANAGERS: DIRECTING POLICY IMPLEMENTATION

"As I was learning at the Pentagon, it was much safer to win support within the department by subordinating one's views or the views of the President to career officials than to try to reorient an entire department in line with the President's thinking and his national security priorities."
— Donald Rumsfeld (2011, p. 323)

Nearly half of all appointed positions within the executive branch require direct management of subordinate career civil servants. Both appointments that require Senate confirmation (PAS) and noncareer appointed members of the SES (SES-NA) supervise career bureaucrats.

This is by design. Presidents understand that "operations constitute policy" (Nathan 1983). Presidential administrations have recognized that the day-to-day management decisions appointees take can involve high-level policymaking. Appointees deploy personnel, influence agency organization, and marshal support for the president's agenda in their organizations. By taking management actions inherent in their jobs, appointees take a lead on determining policy.

1.1 Introduction

Political appointees are often, first and foremost, managers. As intermediaries between the president and the bureaucracy, they direct bureaucratic effort and marshal support for the president's agenda within their organizations. In this role, appointees often confront resistance from the bureaucracy—bureaucrats may be skeptical of the 'strangers' at the helm of their organizations (Heclo 1977) or resistant to the administration's agenda (Randall 1979; Kennedy 2015), or both. Because appointees require the assistance of career civil servants to implement the president's policies, an administration cannot ignore the preferences of career bureaucrats without potentially undermining bureaucratic support for its policy initiatives (Zegart 2000; Lowande 2018; Lowande and Rogowski 2021; Acs 2021; Benn 2022). To ensure bureaucratic support, presidents understand that some policy concessions to the bu-

reaucracy may be necessary—but, for appointees, these concessions may also ease the burden of managing a hostile bureaucracy, as Rumsfeld (2011) explains.

At the same time, appointees understand that their management decisions may be scrutinized by the president. As managers, appointees can acquire a nuanced understanding of the compromises necessary to ensure agency compliance with presidential directives—and yet, for these appointees, how they manage the bureaucrats that report to them influences the president's assessments of their own ability. This means appointees face reputation concerns to demonstrate managerial skill through their management decisions. Appointees that face these reputation concerns may not necessarily use their managerial expertise to further the president's policy interests if doing so jeopardizes their reputation with the president.[1]

This observation suggests that understanding both the management problems appointees confront and appointees' reputation incentives in view of those management problems is central to understanding how appointees exercise—or fail to exercise—control over the bureaucracy on behalf of the president. This chapter explores both of these issues by examining how the accountability relationship between the president and her political appointees affects how appointees manage subordinate career civil servants and, in turn, how the management issues appointees confront shape the accountability relationship between the president and her appointees. A key insight of this analysis is that an appointee's desire to demonstrate management skill—and the need to ensure bureaucratic cooperation in order to do so—impede presidential control over the bureaucracy by creating incentives for appointees to give additional policy concessions to bureaucrats, even when appointees share the president's policy goals.

To explore these issues, I develop a formal model of interactions between an appointee acting as the political leadership of an agency and the career civil servants, when the appointee is subject to oversight by the president. I assume the appointee has the same preferences over policy as the president. In contrast, the bureaucracy is either aligned with or hostile towards the administration's policy aims. I draw a distinction between the policy or pragmatic expertise of the bureaucrat—modeled as a monopoly on policy implementation—and the managerial talent of the appointee. An appointee's managerial talent complements bureaucratic effort: a talented manager improves the efficacy of bureaucratic effort, while a weak manager dilutes the

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[1]This reputation concern is in contrast to the organizational reputation that bureaucrats have a shared interest in developing, discussed in D. Carpenter (2010).

value of bureaucratic effort by possibly impeding policy success. This will imply that appointees that are skilled managers are always able to hold the line on policy more easily, whereas weak managers must provide additional policy inducements to bureaucrats to compensate for their managerial shortcomings and motivate the bureaucrats to act.

A central premise of the model is that the president has less information about the inner-workings of an agency than the actors working inside the organization. To capture this, I assume the president is uncertain about both an appointee's managerial skill and the extent of policy disagreement between the administration and the bureaucracy, whereas the appointee knows the bias of the bureaucrat and the bureaucrat knows talent of the appointee. This means that the president must infer an appointee's skill based on the appointee's policy choice and whether the policy was successfully implemented. If the appointee is a talented manager, policy implementation will always be successful, provided the bureaucrat cooperates. Instead, if the appointee is a weak manager, policy implementation may be unsuccessful, even if the bureaucrat cooperates, due to poor management.

In formalizing these assumptions, the model highlights both challenges presidents confront in managing their appointees and challenges appointees confront in managing the bureaucracy. The president faces a two-dimensional inference problem: she does not know whether her appointee is weak or the bureaucracy is hostile. The president can only infer an appointee's talent and the difficulty of the management problem the appointee faces. Meanwhile, appointees can prioritize signaling their skill or the difficulty of their management problem. Appointees would like to hold the administration's line on policy, but bureaucratic support may be easier for appointees to sustain the more policy reflects the views of the careerists tasked with implementation. This matters precisely because appointees are evaluated, in part, on the basis of performance—not just what policies they dictate. This means an appointee may have an incentive to use their informational advantage to shift policy towards bureaucratic interests in order to ensure bureaucratic cooperation and improve their reputation with the president.

The key results (Propositions 1.2, 1.3, and 1.4) demonstrate that both weak and talented appointees may have incentives to shift policy towards the interests of bureaucrats under different conditions provided there is the potential for sufficient disagreement between the bureaucracy and the administration. If officeholding benefits are sufficiently large and the president believes the appointee's management

problem is sufficiently likely to be difficult, weaker appointees facing an aligned bureaucracy will shift policy towards the bureaucrat in order to motivate the bureaucrat to exert costly effort and avoid revealing their managerial weaknesses by imitating talented appointees that face a hard management problem (Proposition 1.2). Instead, if either office-holding benefits are not too large or the president believes the appointee's management problem is sufficiently likely to be easy, talented appointees that face a hostile bureaucracy will select policy more aligned with the interests of the bureaucracy to ensure weak appointees facing an easy management problem will be unwilling or unable to imitate their policy choices (Propositions 1.3 and 1.4).

The results reveal that it may be difficult for presidents to distinguish between an appointee simply exercising poor control over the bureaucracy (i.e., capture) and an appointee that confronts a genuinely difficult disagreement with career bureaucrats in his department. As a result, the president does not necessarily penalize appointees that provide excess concessions to the bureaucracy, so long as appointees maintain a reputation for strong management. Knowing this, weak managers may exploit the fact that even talented managers sometimes need to moderate their policy demands to gain cooperation from bureaucrats, whereas talented managers may skew policy towards the bureaucracy in order to prevent such imitation and preserve their reputation by reinforcing that they are facing strong resistance.

I show that presidents may retain appointees even when they give more concessions to bureaucrats than the president would like. In each case, providing additional policy concessions to the bureaucrat improves the appointee's reputation with the president and guarantees he retains his position. However, the improvement in the appointee's reputation with the president comes at the expense of tighter control over policy as appointees give more concessions than are necessary to motivate bureaucrats to exert effort. This loss of control is due to both the nature of the management problems appointees confront and appointees' reputation concerns to demonstrate strong management skills in the face of those problems.

Importantly, the results reflect presidents' struggles in practice. Presidents frequently complain that their appointees have conceded too much to their bureaucracies (Heclo 1977; Rodman 2010). Nevertheless, presidents are often reluctant to remove high-ranking political appointees even when appointees fail to hold the administration's line on policy. For instance, President Nixon complained about the "Donald Rumsfeld problem" when Rumsfeld repeatedly took positions that went

against the administration's preferences. As Director of the Office of Economic Opportunity (OEO), Rumsfeld emerged as a forceful advocate for his agency even when it meant he was out of step with the policy priorities of the Nixon administration. Yet President Nixon did not remove Rumsfeld. Some accounts have suggested that President Nixon's reluctance to dismiss Rumsfeld owed to his own conflict-avoidant tendencies (Rodman 2010; Mann 2004 p. 12). And yet few would dispute that President Nixon was capable of exercising strong political control over his cabinet when necessary.

Ultimately, this chapter highlights structural limitations of administrative tools to preserve presidential control over policymaking (Nathan 1983; Burke 2000). A central point of this chapter is that the management issues appointees confront affect presidential control over policymaking (Nathan 1983; Burke 2000) by determining the type of agency problem the president confronts with her appointees. In particular, appointees must gain the support of career bureaucrats in order to effectively implement the president's policy agenda (Heclo 1977; Lowande 2018) and improve their reputation with the president (L. Gailmard 2022). By situating management concerns at the center of both presidential appointments and interactions between appointees and the bureaucracy, this argument represents a substantively important departure from previous theories of bureaucratic drift or insubordination.

This chapter is structured as follows. First, I review the related literature. Then, I present a formal description of the model and assumptions. Next, I analyze the model and state the key equilibrium results. I then conclude.

1.2 Related Literature

Administrative presidency strategies often rely on political appointees to exert control over the bureaucracy (T. Moe 1985; Lewis 2010). Previous work has emphasized that presidents attempt to appoint officials that share their views (T. Moe 1985; Lewis 2005; Lewis 2010), but often face tradeoffs between ideological alignment and competence (George A. Krause and O'Connell 2019). While ideological alignment with the president is key, I argue that presidents also recognize the importance of managerial skill and seek to appoint and retain officials that not only agree with their policy goals, but also have the skill to effectively manage their bureaucracies (Heclo 1977; Rodman 2010) in order to preserve control over policymaking and motivate bureaucrats to act.

Promoting Managerial Skill   While much empirical work finds that appointees increase policy alignment between their agencies and the president in practice (T. Moe 1985; Randall 1979; Stewart Jr and Cromartie 1982; B Dan Wood 1990; B Dan Wood and Anderson 1993; B Dan Wood and Richard W Waterman 1991a, wood1994bureaucratic), the appointment process may not necessarily identify the most qualified applicants. Moreover, politicization and centralization may worsen bureaucratic performance by introducing high turnover amongst managers (Heclo 1977; Dunn 1997) or by installing inept or untested managers (Cohen 1998), which potentially erodes bureaucratic expertise (S. Gailmard and Patty 2007). This means interactions with bureaucrats may be negotiated by unqualified or untested appointees.

An important premise of this model is that ideology and managerial skill are different dimensions of an appointee's qualifications. This implies that screening for ideological alignment with the president does not perfectly screen for managerial skill.[2] As administrations have increasingly emphasized loyalty in personnel decisions (Lewis 2010), the president may be uncertain about an appointee's managerial capabilities, especially if appointees lack previous public sector experience.

Nevertheless, administrations still prioritize managerial skill in their appointments. For instance, George W. Bush and his team of advisors dismissed several potential candidates for defense secretary based on concerns about the candidates' managerial capabilities. Within the Bush administration, there was a clear consensus that the Pentagon required "strong management at the top" (Mann 2004 p. 263). Paul Wolfowitz, a veteran of several Republican administrations, was thought to be a top contender for the post, but lacked the managerial skill to lead the large Pentagon bureaucracy:

> "Wolfowitz was admired, even by many of his adversaries, for his remarkable intelligence and diligence, but he was also criticized, even by some of his supporters for his lack of skill or interest in administration. Memos passing through the bureaucracy tended to linger on his desk. . . " (Mann 2004 p. 263)

Likewise, Pennsylvania Governor Tom Ridge and the former Senator from Indiana Dan Coats were considered for the position, despite the concerns that "a politician

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[2]A clear example of this is Michael Brown's controversial management of the FEMA response to Hurricane Katrina.

might not know much about the inner workings of the Department of Defense" (Mann 2004, p. 263). While mounting political opposition emerged with respect to Ridge's liberal voting record on defense issues, Coats' appointment would have caused managerial difficulties for Bush himself, who desired a Secretary of Defense who could act as an effective counterweight to Colin Powell at the State Department.

During an interview with Coats during the transition period, Coats asked if he would have Bush's support if Powell encroached on his turf. Reluctant to adjudicate interagency conflicts, Bush instead sought to appoint a secretary that would be able to negotiate interactions with other cabinet members independently. Given his extensive management experience both in government and in the private sector, Donald Rumsfeld was thought to possess the skill necessary to manage operations at the Pentagon.

Motivating Bureaucrats   Even under the direction of skilled leadership, bureaucrats may resist (Golden 2000) or drag their feet implementing policies they oppose. While presidents may dictate policy positions, bureaucrats can always defy presidential directives or reforms by simply refusing to act. In a notable instance of bureaucratic subterfuge, bureaucrats in the State Department neglected to remove an arsenal of obsolete Jupiter missiles from Turkey despite repeated direct orders from President Kennedy to do so because they were concerned about the implications of the action for bilateral relations with Turkey (Zegart 2000, p. 50-51).

Recent work emphasizes that bureaucratic non-compliance remains a common impediment to effective implementation (George A Krause 2009; Dickinson 2009; George A Krause and Dupay 2009; Rudalevige 2012; Kennedy 2015; Lowande 2018). Given this, presidents and their appointees understand they may need to moderate their policy demands in order to cultivate bureaucratic support. This suggests that the threat of bureaucratic resistance has a powerful effect on policymaking— even when presidents hold extensive unilateral authority—by constraining what the president is able to accomplish through the bureaucracy (Acs 2021).

To cultivate bureaucratic support, appointees may engage in advocacy, championing the views of the bureaucracy rather than the policy agenda of the president (Heclo 1977). A natural explanation for appointees tilting the balance between the president and the bureaucracy in favor of the career officials is that appointees, despite initial reservations, may actually come to share the views of their organizations. Previous work has emphasized that appointees may come to identify with the views and

mandates of their respective agencies (Heclo 1977), while more recent work has discussed the possibility that bureaucrats may persuade appointees to "come around" to their views (Alexander and Stacy 2021).[3] Yet both arguments attribute this assimilation to preference changes that arise either through exposure (Heclo 1977) or information transmission (Alexander and Stacy 2021) and so fail to capture important structural limitations to presidential control. Instead, ideological disagreements—not informational challenges—are at the core of the management difficulties between appointees and bureaucrats that I study.

Furthermore, advocacy alone is not sufficient to produce bureaucratic support: management skills also matter to the bureaucrats exerting effort on behalf of the president's policy goals. The more management skill a political appointee develops, "the more the value of his advocacy [sic] appreciates in the eyes of the bureaucrats below" (Heclo, 1977, pg. 196). Bureaucrats privy to the day-to-day operations within their departments notice the skill of the political leadership. Describing a cabinet secretary, a bureau chief noted:

> "He had charisma, a really fine and open man who a lot of civil servants around here liked. But he never got a grip on the department. He didn't really fight for what was needed and if he made a decision it was because he got maneuvered into it by the staff." (Heclo, 1977, pg. 196)

This suggests bureaucrats are aware of the strength of the political leadership—and are aware that weak leadership leaves their organizations vulnerable Heclo 1977.

To capture these dynamics, the model embeds a tension between control over policy and bureaucratic cooperation by assuming the benefits of policy success depend on each actor's ideology, as well as the management skill of the political leadership. This assumption helps to illustrate how the strategic mechanism in this chapter differs those in from previous work. The assumption implies a bureaucrat's willingness to exert effort implementing a policy depends on both how aligned the policy is with the bureaucrat's preferences and how effective an appointee is at managing bureaucratic operations. Both of these aspects of the appointee's management problem are common knowledge to appointees and bureaucrats.

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[3]Prato and Turner (2022) also consider mechanisms by which the president may persuade bureaucrats to act in her interest. However, their model similarly focuses on policy-specific information asymmetries between top-level principals and bureaucrats that affect bureaucrat's policy actions.

The main result of this model is that appointees may make policy concessions even when they disagree with the bureaucrat. The concessions, in part, serve a motivational role Hirsch 2016 by encouraging bureaucrats to comply with implementation, but also enable appointees to compensate for managerial weaknesses. In equilibrium, policy reflects the preferences of career bureaucrats not because of an appointee's fealty to the department or learning on-the-job, but rather due to the appointee's own reputation concerns and fundamental managerial imperatives. As a result, the equilibrium logic is able to capture the temptation to subordinate the president's views to those of the bureaucracy described by Rumsfeld: that doing so is an easier path to bureaucratic support for a political appointee.

1.3 The Formal Model

I consider a two-period model in which a political appointee (A) dictates a policy position on behalf of the administration for a bureaucrat (B) to implement. Successful implementation requires that the bureaucrat exert costly effort. The appointee knows both his own ability and the bureaucrat's bias, whereas the president (P) is uncertain of both her appointee's managerial talent and the extent of policy disagreement between her administration and the bureaucracy. The bureaucrat's bias determines the policy concessions necessary to incentivize implementation effort: less aligned bureaucrats require more policy concessions in order to exert effort implementing a policy, whereas more aligned bureaucrats require less. The president observes policymaking by the appointee and whether implementation successful and decides whether to retain the appointee. The president always seeks to retain only talented appointees, but faces a difficult inference problem: if the president observes policy concessions to the bureaucrat, the president must discern whether an appointee faces a difficult management problem or is simply a poor manager.

Formal Description

In each policymaking period $t = 1, 2$, the appointee chooses a policy position $x_t \in [0, 1]$ and the bureaucrat either exerts effort implementing the position ($e_t = 1$) or shirks ($e_t = 0$). Implementation effort is costly for the bureaucrat to provide and the bureaucrat incurs cost $0 < c < \overline{c} \equiv \frac{\theta_l}{2 + \theta_l}$ if he exerts effort ($e_t = 1$).

Appointees are characterized by their managerial talent, $\theta \in \{\theta_l, 1\}$ where $\theta_l \in (0, 1)$, which is their private information. Managerial talent is a complement to bureaucratic effort: an appointee that is an effective manger is better able to translate bureaucratic effort into policy success. The common prior belief is that an appointee is talented,

$\theta = 1$, with probability τ. With probability $1 - \tau$, the appointee has poor management skills, and $\theta = \theta_l$.

Policy Success Successful implementation depends on both an appointee's management skill (θ) and bureaucratic effort (e_t). A policy x_t is successfully implemented ($y_t = 1$) with probability θe_t and fails ($y_t = 0$) with probability $1 - \theta e_t$, or

$$y_t = \begin{cases} 1 & \text{with probability } \theta e_t \\ 0 & \text{with probability } 1 - \theta e_t. \end{cases}$$

Again, this captures that poor management dilutes the value or efficacy of bureaucratic effort.

Bureaucratic Resistance The president and her appointee share the same preferences over policy. I assume that the president and appointee's ideal policy is $x_t = 0$, whereas the bureaucrat's ideal policy is $x_t = b \in \{b_l, b_h\}$ with $0 < b_l < b_h < 1$. Throughout the analysis, I refer to a bureaucrat as hostile if there is substantial disagreement between the administration and the bureaucrat, or $b = b_h$, whereas I refer a bureaucrat as aligned if there is limited disagreement between the administration and the bureaucrat, or $b = b_l$.

The benefit of policy success ($y_t = 1$) to each actor is greater the more the policy reflects their preferences. I refer to bureaucratic bias, b, as the degree of bureaucratic resistance as it captures the extent of disagreement between the administration and the bureaucrat. If the bureaucrat is aligned (i.e., $b = b_l$), then the bureaucrat is relatively easy to motivate, in that the bureaucrat requires less policy concessions in order to exert effort. If the bureaucrat is hostile (i.e., $b = b_h$), then the bureaucrat is hard to motivate and the bureaucrat requires more policy concessions in order to exert effort.

Each actor obtains utility in period t given by:

$$u_t^P = (1 - x_t) y_t$$
$$u_t^A = (1 - x_t) y_t + \rho \{\text{in office}\}$$
$$u_t^B = (1 - |b - x_t|) y_t - c e_t.$$

The parameter $\rho < \frac{1}{\delta}\left(2 - b_l - \frac{c}{\theta_l}\right) + \tau\left[1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right] \equiv \overline{\rho}$ captures the pure-office holding benefit to the appointee.[4]

Observing Policy and Success Following the first period, the president observes the position taken and whether or not it was successfully implemented (x_1, y_1) and either retains $(r = 1)$ or removes $(r = 0)$ the appointee. If the appointee is removed, he is replaced by an ex ante identical appointee.

Information The president does not know either the appointee's managerial capabilities, $\theta \in \{\theta_l, 1\}$, or bureaucratic resistance, $b \in \{b_l, b_h\}$. The president only knows the prior probability an untried appointee is talented, τ, and the prior probability a bureaucratic is hostile, β. The appointee knows his own skill, θ, and the bureaucrat's bias, b. The bureaucrat knows whether or not the appointee is a skill manager, θ. This reflects that both appointees and bureaucrats have more information about the day-to-day inner workings within a department, while the president often only observes the outcomes of interactions between their appointees and the career bureaucrats they manage.

Strategies and Beliefs A strategy for the bureaucrat is a probability of exerting effort for each possible policy position given his policy preferences and appointee skill: $\hat{e}_t : b \times \theta \times x_t \to [0, 1]$. A strategy for the appointee is a probability distribution over policy positions given his management skill and the bureaucrat's preferences: $\hat{\chi}_t : \theta \times b \times [0, 1] \to [0, 1]$.[5] A strategy for the president is probability of retention for each possible policy position and success or failure $\hat{r} : x_1 \times y_1 \to [0, 1]$. The president's beliefs are given by $\hat{\tau} : x_1 \times y_1 \to [0, 1]$ and assign for each policy choice and outcome (x_1, y_1) a probability the appointee is talented $(\theta = 1)$.

1.4 Analysis
The analysis identifies perfect Bayesian equilibria (PBE) in which beliefs satisfy the D1 criterion Banks and Sobel 1987. This refinement requires that beliefs following out-of-equilibrium actions assign positive probability only to the type most tempted by the deviation, relative to the type's expected utility in the equilibrium profile.

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[4]This ensures that the restriction to $x \in [0, 1]$ does not arbitrarily limit a talented appointee's ability to differentiate himself.

[5]A pure strategy is simply a policy choice given the appointee's management skill and the bureaucrat's preferences: $\hat{x}_t : \theta \times b \to [0, 1]$. I use this notation if the equilibrium is in pure strategies for the appointee.

This will mean that off-path policies will be associated with weak appointees. If multiple equilibria exist, I focus on the equilibrium that maximizes the president's expected utility.

An equilibrium is a profile $(\chi^*, e^*, r^*, \tau^*)$ that specifies the appointee's policy choices, bureaucrat's effort decisions, and the president's retention decision and beliefs. In equilibrium, the president understands how her appointees select policy. Similarly, appointees understand the inference the president will draw about their managerial skill based on their policy choices and the policy outcomes. I focus on equilibrium strategies in the main text and provide full characterizations of equilibria in Appendix A.1 and off-path beliefs in Appendix A.2. In Appendix A.3, I characterize general features of equilibria. In Appendix A.4, I provide conditions for principal welfare maximization.

Policymaking Without Reputation Concerns

First, I consider how an appointee selects policy in the second period when he does not face removal by the president and, therefore, does not face reputation concerns to demonstrate managerial skill. In each period, the appointee's policy choice depends on the bureaucrat's willingness to exert effort. In the second period, the appointee will choose the policy most aligned with the president's interests that ensures bureaucratic cooperation.

Bureaucratic Cooperation $(t = 2)$ In the second period, bureaucratic effort does not affect an appointee's retention prospects. This means the bureaucrat will exert effort only if the policy benefits in the second period outweigh the cost of effort, or

$$\theta(1 - |b - x_2|) \geq c$$

which implies

$$e_2^*(\theta, x; b) = \begin{cases} 1 & \text{if } b + \left(1 - \frac{c}{\theta}\right) \geq x_2 \geq b - \left(1 - \frac{c}{\theta}\right) \\ 0 & \text{otherwise.} \end{cases} \tag{1.1}$$

This captures that a bureaucrat is more willing to exert effort when the appointee is more skilled or when policy reflects his preferences.

Appointee's Policy Choice $(t = 2)$ Without reputation concerns, both skilled and weak appointees attempt to maximize their policy utility given their private information—their managerial skill and the difficulty of the management problem

they confront. This also maximizes the president's expected utility and control over policy since I assume there is no preference conflict between the president and her appointees.

Given the bureaucrat's effort decision, an appointee will select policy according to

$$x_2^*(b; \theta) = \begin{cases} 0 & \text{if } b \leq 1 - \frac{c}{\theta} \\ b - \left(1 - \frac{c}{\theta}\right) & \text{if } b > 1 - \frac{c}{\theta}. \end{cases} \tag{1.2}$$

The appointee will only select the administration's ex ante ideal policy if there is substantial alignment between the bureaucrat and the administration. Otherwise, the appointee is willing to moderate his policy demands—selecting policy closer to the bureaucrat's ideal—in order to encourage bureaucratic effort. Ensuring bureaucratic cooperation is in the administration's interests even if it requires significant policy concessions.

Assumption 1.1 *(Policy Disagreement)* $1 - \frac{c}{\theta_l} < b_l < 1 - c$ *and* $b_h > b_l + c \left(\frac{1}{\theta_l} - 1\right)$.

Assumption 1.1 guarantees that (i) a bureaucrat always requires more policy concessions from a weaker appointee in order to exert effort, but (ii) there is overlap in policies different types of bureaucrats will exert effort to implement. That is, the aligned bureaucrat is also willing to exert effort implementing some policies the hostile bureaucrat is willing to implement. Given assumption 1.1, if the bureaucrat is aligned, a talented manager is able to induce cooperation without policy concessions, whereas if the bureaucrat is hostile, even a talented appointee must offer policy concessions in order to induce the bureaucrat to exert effort.

Lemma 1.1 and Remark 1 state these implications formally. Lemma 1.1 describes the second period policy choice for both skilled and weak appointees, while Remark 1 describes the spatial configuration of the policies each type of appointee adopts. Given assumption 1.1, the policy adopted by a talented appointee facing a hostile bureaucracy is always further from the president's ideal than policies adopted by even a weak appointee facing an aligned bureaucracy. Figure 1.1 depicts the spacial configuration of second period policy graphically.

Lemma 1.1 *(Second Period Policy) In any equilibrium,*

$$x_2^*(b_l; 1) = 0 \qquad\qquad x_2^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_2^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_2^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).$$

$x_2^*(b_l; 1)$ $x_2^*(b_l; \theta_l)$ $x_2^*(b_h; 1)$ $x_2^*(b_h; \theta_l)$

$$
\vdash\!\!\!\!\!\!-\!\!\!\!\!+\!\!\!\!\!\!-\!\!\!\!\!+\!\!\!\!\!\!-\!\!\!\!\!\!-\!\!\!\!\!\!-\!\!\!\!\!\!-\!\!\!\!\!\!\top\!\!\!\!\!\!-\!\!\!\!\!+\!\!\!\!\!\!-\!\!\!\!\!\!-\!\!\!\!\!\!\dashv
$$

0   b_l b_h
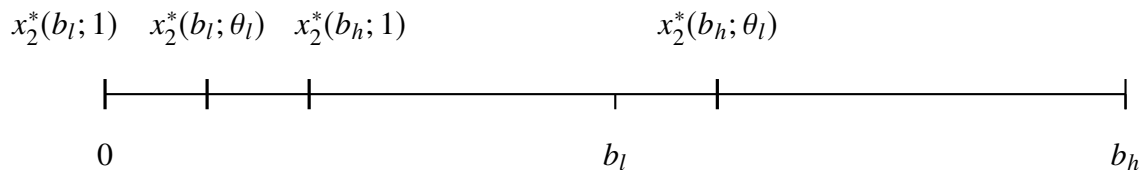
Figure 1.1: Policy ($t = 2$).

Remark 1 Given assumption 1.1,

$$
x_2^*(b_l; 1) = 0 < x_2^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right) < x_2^*(b_h; 1) = b_h - (1-c) < x_2^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).
$$

Retention Decision

Given the policymaking behavior described in Lemma 1.1, the president's second period expected utility given an appointee of type θ and bureaucrat with preferences b is

$$
\mathbb{E}u_2^P(\theta, b) = \begin{cases} \theta & \text{if } b \leq 1 - \frac{c}{\theta} \\ \theta\left(2 - b - \frac{c}{\theta}\right) & \text{if } b > 1 - \frac{c}{\theta}. \end{cases} \tag{1.3}
$$

The president always prefers a skilled manager to an ineffective one, irrespective of the type of bureaucracy the appointee faces. This is because talented managers select policies more aligned with the president's interests and are better able to ensure the success of those policies through their management. This observation implies that the president will only retain an appointee if the president believes the appointee is at least as talented as his replacement.

Lemma 1.2 *(Appointee Retention) The president will retain an appointee only if* $\hat{\tau} \geq \tau$. *Otherwise, if* $\hat{\tau} < \tau$, *the president dismisses the appointee.*

Lemma 1.2 states that presidents seek to retain only skilled managers and dismiss appointees with weaker management skills. Again, this follows directly from the observation that talented appointees guarantee both tighter control over policy and a greater likelihood of success with those policies. The president's desire to retain only talented appointees creates reputation concerns for appointees who seek to demonstrate managerial talent in order to be retained.

Policymaking With Reputation Concerns

Now I consider policymaking by appointees in the first period, when appointees have reputation concerns to demonstrate management skill. I assume throughout this analysis that appointees place a sufficiently high value on retaining their positions. This captures the substantively important case when an appointee's reputation concerns are in conflict with the policy goals of the administration. Assumption 1.2 guarantees that appointees are willing to sacrifice policy utility if doing so improves their retention prospects.

Assumption 1.2 $\rho > \frac{1}{\delta}\left[(b_h - b_l) - \left(\frac{c}{\theta_l} - c\right)\right] + \tau\left[1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right] \equiv \underline{\rho}.$

Bureaucratic Cooperation ($t = 1$)   In the first period, the bureaucrat's effort affects the information available to the president when she decides whether to retain the appointee by determining the likelihood of policy success. If the president believes both talented and weak appointees select a particular policy and that bureaucrats exert effort implementing talented appointees' policies, then policy failure reveals an appointee is weak—as only weak appointees experience policy failure if the bureaucrat cooperates.

Because the bureaucrat's effort affects the information available to the president, I first consider under what conditions a bureaucrat may have incentives to undermine implementation in order to convey information to the president to influence her retention decision. A bureaucrat's willingness to undermine implementation depends on the bureaucrat's preferences over the type of appointee he confronts in the second period. Given the policymaking behavior described in Lemma 1.1, the bureaucrat's second period expected utility from an appointee with skill θ is

$$\mathbb{E}u_2^B(\theta; b) = \begin{cases} \theta(1 - b) - c & \text{if } b \leq 1 - \frac{c}{\theta} \\ 0 & \text{if } b > 1 - \frac{c}{\theta}. \end{cases} \tag{1.4}$$

While aligned bureaucrats ($b = b_l$) prefer a skilled manager to an ineffective one, hostile bureaucrats ($b = b_h$) are indifferent between skilled and unskilled managers. This is because, while skilled managers improve the likelihood of policy success, unskilled managers offer hostile bureaucrats policy concessions that compensate for their worse management. This means hostile bureaucrats exert effort as in the second period or if

$$\theta(1 - |b_h - x|) \geq c, \tag{1.5}$$

whereas aligned bureaucrats may have an incentive to sabotage implementation by weak appointees if policy success would lead to the appointee's retention.

In contrast, because the aligned bureaucrat strictly prefers to be managed by a talented appointee, his first period effort incentives depend on the inference the president will draw based on success or failure of a particular policy choice. If an appointee's policy choice perfectly reveals their managerial abilities, then an aligned bureaucrat will exert effort as in the second period, or provided

$$\theta(1 - |b_l - x|) \geq c. \tag{1.6}$$

If success ensures retention, an aligned bureaucrat managed by a talented appointee will exert effort only if:

$$(1 - |b_l - x|) \geq c - \delta(1 - \tau)(1 - b_l - c). \tag{1.7}$$

In contrast, if success ensures retention, an aligned bureaucrat managed by a weak appointee will exert effort only if:

$$\theta_l(1 - |b_l - x|) \geq c + \delta\theta_l\tau(1 - b_l - c). \tag{1.8}$$

Conditions 1.7 and 1.8 show that an aligned bureaucrat will be more willing to exert effort on behalf of a talented appointee and less willing to exert effort on behalf of a weak appointee in the first period. This means an aligned bureaucrat requires more policy concessions from a weak appointee in the first period in order to cooperate if policy success ensures retention.

The aligned bureaucrat will be unwilling to shirk in order to guarantee removal of a weak appointee if there is sufficient policy disagreement, where

$$\theta_l(1 - |b_l - (b_h - (1 - c))|) - c > \delta\tau\theta_l(1 - b_l - c) \tag{1.9}$$

gives the condition

$$b_h > b_l + c\left(\frac{1}{\theta_l} - 1\right) + \delta\tau(1 - b_l - c) \equiv \overline{b}_h. \tag{1.10}$$

This ensures that the first period cost of sabotage outweighs the future benefit of good management. Given the configuration of policy preferences (assumption 1.1), as b_h increases, aligned bureaucrats obtain more policy concessions as weak appointees attempt to build a strong reputation with the president.

Instead if $b_h \leq \bar{b}_h$, an aligned bureaucrat will shirk even if a weak appointee selects policy more aligned with the bureaucrat's preferences. This means weak appointees facing an aligned bureaucrat will be unable to generate bureaucratic support without revealing their weakness to the president. I refer to this behavior as bureaucratic sabotage as aligned appointees are willing to incur a first period policy cost to ensure removal of a weak appointee.

Appointee's Policy Choice ($t = 1$) The key insight in this analysis is that appointees facing reputation concerns may distort their policy choices in order to improve their reputation with the president and ensure retention. In particular, appointees may select policies more aligned with the interests of the bureaucrat, rather than exercising maximal policy control on behalf of the president. I refer to this behavior as appointee capture.

Before preceding with the analysis, I provide a formal conditions for appointee capture (definition 1.1). Intuitively, appointee capture occurs when an appointee gives more policy concessions to bureaucrats than the president would like. While the president understands that policy concessions are sometimes necessary to encourage bureaucratic cooperation, she prefers appointees give no more concessions than are necessary to induce effort.

Definition 1.1 *(Presidential Control vs. Appointee Capture) Presidential control occurs if $x_1^*(b; \theta) = x_2^*(b; \theta)$. Appointee capture occurs if $x_1^*(b; \theta) > x_2^*(b; \theta)$.*

If $b_h \leq \bar{b}_h$, then an aligned bureaucrat will be unwilling to cooperate with a weak appointee if policy success ensures the appointee is retained—even if the weak appointee offers additional policy concessions. This undermines a weak appointee's incentives to hide behind the hard management problem of a talented appointee. The aligned bureaucrat maintains presidential control over policy by sabotaging implementation of policies that could lead to retention of weak appointees. This undermines weak appointees' incentives to distort policy, and, at the same time, enables talented appointees facing hard management problems to maintain control without fear of imitation. Proposition 1.1 states this result.

Proposition 1.1 *(Presidential Control With Sabotage) Let $\rho > \underline{\rho}$. There exists an equilibrium that satisfies the D1 refinement, in which the president maintains control over policy in the first period only if $b_h \leq \bar{b}_h$.*

Instead, if $b_h > \bar{b}_h$, an aligned bureaucrat is willing to exert effort implementing policies he views as sufficiently favorable, even if that means a weak appointee may be retained. This affects policymaking incentives for both weak appointees and talented appointees facing a hostile bureaucracy. Weak appointees may be tempted to imitate the talented appointee that faces a hostile bureaucracy, and talented appointees facing a hostile bureaucracy may attempt to differentiate themselves from weak appointees by emphasizing the difficulty of their management problem.

A weak appointee's ability to exploit the fact that even talented appointees may need to provide concessions to bureaucrats to gain retention depends on the president's ex ante belief that the bureaucrat is hostile, which captures the difficulty of the management problem an appointee faces. This impacts the incentives for both talented appointees facing hard management problems and weak appointees to shift policy towards bureaucratic interests. Either the president believes the appointee is likely to face a hostile bureaucracy or she believes the appointee is likely to face an aligned bureaucracy. In the first case, the president anticipates that the appointee likely faces a hard management problem, whereas, in the latter case, the president anticipates that the appointee likely faces an easy management problem. Definition 1.2 formally states this condition.

Definition 1.2 *(Management Problem) If $\beta \geq \dfrac{\theta_l}{1 + \theta_l} \equiv \bar{\beta}$, then the president believes the appointee is sufficiently likely to confront a hard management problem. If $\beta < \bar{\beta}$, then the president believes the appointee is sufficiently likely to confront an easy management problem.*

Under either condition, a talented appointee facing an aligned bureaucrat can always ensure success without policy concessions—and is the only type of appointee able to do so. This means policy success without concessions will always reveal strong management skill. In any equilibrium, talented appointees that face an easy management problem will always be able to hold the administration's line on policy and will always be retained. Therefore, talented appointees that face an easy management problem will never appear captured.

There are three different types of equilibrium capture that may arise. First, weak appointees facing an easy management problem may give additional policy concessions to the bureaucrat to imitate talented appointees that face a hard management problem. Second, talented appointees that face a hard management give additional concessions to avoid reinforce that their management problem is difficult and avoid

imitation. Third, both talented and weak appointees that face a hard management problem give additional concessions to bureaucrats. In what follows, I provide conditions for when each type of capture occurs.

If a Hard Management Problem Is Likely   First, I consider the types of capture that arise when the president believes appointees are likely to face a hard management problem. If the management problem is sufficiently likely to be hard (i.e., $\beta \geq \overline{\beta}$) and office motivations are sufficiently strong (i.e., $\rho > \hat{\rho}$), talented appointees and weak appointees facing a hostile bureaucracy will select the policy that maximizes the president's control over policy. This is because both talented appointees and weak appointees facing a hostile bureaucracy do not confront a tradeoff between policy control and retention.

A talented appointee will always be able to distinguish himself from a weak appointee through policy success if he selects the policy that maximizes his policy utility. Similarly, if the president believes the management problem is sufficiently likely to be difficult, a talented appointee facing a hostile bureaucracy is always retained provided implementation is successful, even if he selects a policy that is also chosen by a weak appointee facing an aligned bureaucrat. This means a weak appointee facing a hostile bureaucracy cannot ensure bureaucratic cooperation without revealing his managerial weaknesses. In order to gain the cooperation of hostile bureaucrats, a weak appointee must provide more policy concessions to the bureaucrat than a talented appointee facing the same type management problem. Given this, a weak appointee facing a hostile bureaucracy will choose the position that maximizes his policy utility even if doing so ensures removal.

In contrast, a weak appointee facing an easy management problem confronts a tradeoff between policy control and retention: he can either promote the administration's interests at the expense of his own career concerns, or he can provide more concessions to the bureaucrat and potentially avoid removal. If the bureaucrat is willing to cooperate and officeholding benefits are sufficiently large, the benefit of retention outweighs the loss of policy control and the weak appointee facing an aligned bureaucrat selects the policy a talented appointee chooses when facing a hard management problem. Proposition 1.2 states this result formally: if the management problem is sufficiently likely to be hard and office motives are sufficiently strong, the president maintains control over policy in the first period only if either the appointee is talented or the bureaucracy is hostile. Figure 1.2 depicts the equilibrium policy

positions graphically.

Proposition 1.2 *Let $b_h > \bar{b}_h$ and $\beta \geq \bar{\beta}$. Then there exists $\rho > \hat{\rho} \in (\underline{\rho}, \overline{\rho})$ such that, in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy only if either the appointee is talented (i.e., $\theta = 1$) or the bureaucracy is hostile (i.e., $b = b_h$), while the weak appointee facing an easy management problem is captured and*

$$x_1^*(b_l; \theta_l) = b_h - (1 - c). \tag{1.11}$$

In the equilibrium described in Proposition 1.2, the president is unable to distinguish between a talented appointee that faces a hard management problem and a weak appointee that is captured. This means that the president sometimes retains a weak appointee following policy success in the first period. This is costly for the president as retention of a weak appointee results in worse policy utility in the second period. In Appendix A.4, I compare this equilibrium to equilibria in which talented appointees facing hard management problems are captured, but not imitated by weak appointees facing easy management problems. In such an equilibrium, the president is able to distinguish between the type of management problem an appointee faces and possibly also discern the skill of appointee. As the level of office-holding benefits determines the extent of distortions necessary to prevent weak appointees facing an easy management problem from imitating talented appointees facing hard problems, this equilibrium is only welfare maximizing for the president given sufficiently strong office motivations—when distortions by talented appointees would need to be sufficiently large to induce separation.

If the benefits of office-holding are not so large (i.e., $\rho < \hat{\rho}$), then the second period cost of retaining a weak appointee outweighs the first period benefit of increased control by talented appointees. Under these conditions, the equilibria that maximize the president's welfare involve capture of talented appointees that face hard management problems. If $\hat{b} > b_h > \bar{b}_h$, then talented appointees give additional policy concessions to bureaucrats, but the president maintains control over policymaking if the appointee is weak or the bureaucrat is aligned. This worsens first period policymaking if appointees are talented face hard management problems, but improves first period policymaking by weak appointees that face an easy management problem, as these appointees are no longer tempted to distort their policy choice in order to gain retention. This equilibrium also improves second period policymaking by enabling the president to differentiate between talented and
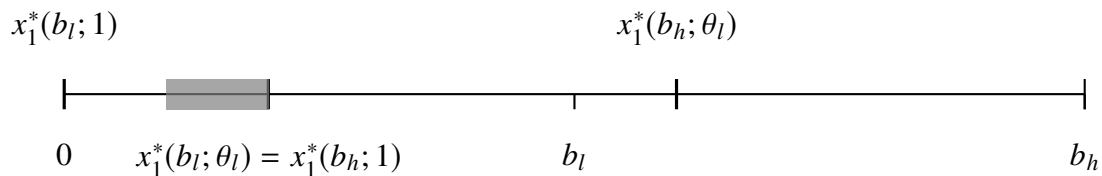
$x_1^*(b_l; 1)$ $x_1^*(b_h; \theta_l)$

0       $x_1^*(b_l; \theta_l) = x_1^*(b_h; 1)$ b_l b_h

Figure 1.2: Policy - weak appointee with an easy management problem is captured ($t = 1$).

Note: The dark shaded region represents the additional policy concessions the aligned bureaucrat receives from a weak appointee.

weak appointees and, therefore, only retain talented appointees. Figure 1.3 illustrates this case.

If $b_h > \hat{b}$, then weak appointees that face an easy management problem can imitate talented appointees that give additional concessions to bureaucrats and generate bureaucratic cooperation. In this case, the president will be unable to differentiate between talented and weak appointees that face hard management problems, if policymaking is successful. This means the president will sometimes retain weak appointees. However, the president will prefer this distortion to distortions by a weak appointee facing an easy management problem, provided office benefits are not too large. Proposition 1.3 summarizes these results.

Proposition 1.3 *Let* $\beta \geq \bar{\beta}$ *and* $\rho < \hat{\rho}$. *If* $\hat{b} > b_h > \bar{b}_h$, *then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control if the appointee is weak (i.e.,* $\theta = \theta_l$*) or if the bureaucrat is aligned (i.e.,* $b = b_l$*), while the talented appointee facing a hard management problem is captured, and*

$$x_1^*(b_h; 1) = b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta \left[\rho - \tau \left(1 - \theta_l \left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] \equiv \hat{x}. \qquad (1.12)$$

Instead, if $b_h > \hat{b}$, *the president only maintains control if the bureaucrat is aligned and both talented and weak appointees facing a hard management problem are captured,* $x_1^*(b_h; 1) = x_1^*(b_h; \theta_l) = \hat{x}$.

If an Easy Management Problem Is Likely   Now I consider the types of capture that arise when the president believes appointees are likely to confront an easy management problem. If the president believes the management problem is sufficiently
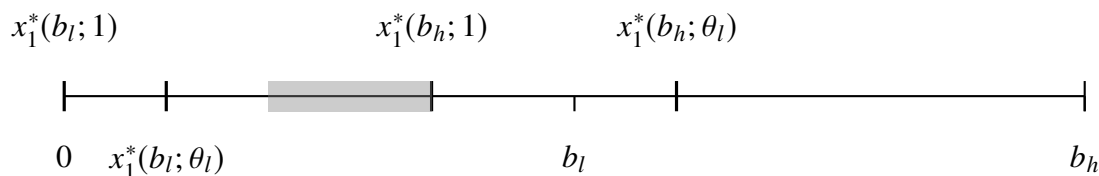
$x_1^*(b_l; 1)$ $\qquad\qquad\qquad$ $x_1^*(b_h; 1)$ $\qquad\qquad$ $x_1^*(b_h; \theta_l)$

$0 \quad x_1^*(b_l; \theta_l)$ $\qquad\qquad\qquad\qquad\qquad\qquad$ b_l $\qquad\qquad\qquad\qquad\qquad\qquad$ b_h

Figure 1.3: Policy - talented appointee with a hard management problem is captured $(t = 1)$.

Note: The light shaded region represents the additional policy concessions a hostile bureaucrat receives from a talented appointee.

likely to be easy (i.e., $\beta < \overline{\beta}$), a talented appointee facing a hard management problem chooses policy to leave the weak appointee facing an easy management problem indifferent between choosing policy to maximize control and shifting policy towards bureaucratic interests to gain retention. If office benefits are not too large (i.e., $\rho < \tilde{\rho}$), then weak appointees facing a hard management problem are unable to imitate the policy success of talented appointees that also face a hard management problem. Instead, if office benefits are sufficiently large (i.e., $\rho \geq \tilde{\rho}$), then weak appointees facing a hard management problem can imitate the policy success of talented appointees. These results are summarized in Proposition 1.4.

Proposition 1.4 *Let $\beta < \overline{\beta}$. If $\underline{\rho} < \rho < \tilde{\rho}$, then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy if either the appointee is weak (i.e., $\theta = \theta_l$) or the bureaucracy is aligned (i.e., $b = b_l$), while the talented appointee facing a hard management problem is captured, and $x_1^*(b_h; 1) = \hat{x}$. If $\rho \geq \tilde{\rho}$, then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy only if the bureaucracy is aligned (i.e., $b = b_l$) and both talented and weak appointees facing a hard management problem are captured $x_1^*(b_h; \theta_l) = x_1^*(b_h; 1) = \hat{x}$.*

1.5 The Evolution of Presidential Control

I now consider how presidential control responds to underlying political conditions and evolves over a president's term. The results have implications for both policy control and personnel management. The results imply a correlation between appointee talent and capture, but also suggest an inference problem: appointee skill cannot necessarily be inferred from policy concessions or, per force, an appointee's
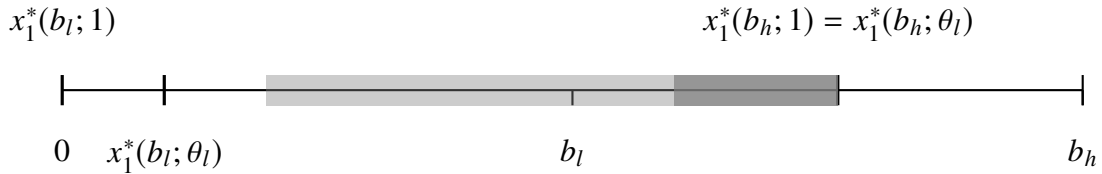
$x_1^*(b_l; 1)$ $\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ $x_1^*(b_h; 1) = x_1^*(b_h; \theta_l)$

$\qquad$ 0 $\quad$ $x_1^*(b_l; \theta_l)$ $\qquad\qquad\qquad\qquad\qquad\qquad$ b_l $\qquad\qquad\qquad\qquad\qquad\qquad$ b_h

Figure 1.4: Policy - appointees with hard management problems are captured ($t = 1$).

Note: The light shaded region represents the additional policy concessions a hostile bureaucrat receives from a talented appointee, whereas the dark shaded region represents the additional policy concessions a hostile bureaucrat receives from a weak appointee.

ideology.

Control over Policy First, I consider the president's control over policy. The results highlight that the president is able to exert more control over policy in the second period, when appointees do not face reputation concerns to demonstrate skill in their dealings with bureaucrats. This suggests that appointees, anticipating departure from office, may actually improve presidential control in their dealings with the bureaucracy, even when they confront strong resistance.

If there is potential for sufficient disagreement (i.e., $b_h > \overline{b}_h$), then the president always exercises more control over policy in the second period. In addition, if management problems are likely to be hard and officeholding benefits are large, then only weak appointees facing an easy management problem distort their policy choices. In this case, the extent of capture increases as bureaucratic hostility increases. Instead, if management problems are likely to be hard, but officeholding benefits are sufficiently small, then talented appointees facing hard management problems are always captured and weak appointees facing hard management problems may be captured if there is enough disagreement with hostile bureaucrats ($b_h > \hat{b}$). In this case, the extent of capture increases as benefits of officeholding increase. Proposition 1.5 states these results.

Proposition 1.5 *(Control over Policy) Let $b_h > \overline{b}_h$. The president exercises more control over policy in the second period (i.e., $x_2^*(b; \theta) \leq x_1^*(b; \theta)$). If $\beta \geq \overline{\beta}$ and $\rho > \hat{\rho}$, then first period policy control worsens as bureaucratic hostility increases (i.e., $b_h \to 1$). If $\beta \geq \overline{\beta}$ and $\rho < \hat{\rho}$, then first period policy control worsens as the benefits of officeholding increase (i.e., $\rho \to \hat{\rho}$).*

Appointee Capture   An important implication of the preceding analysis is how appointee skill may be correlated with capture. Proposition 1.6 describes the relationship between underlying political conditions and appointee capture. A key takeaway of the analysis is that, provided there is potential for sufficient disagreement with bureaucrats, only talented managers may be captured, provided office benefits are sufficiently large, whereas only weak managers are captured if management problems are likely to be hard and officeholding benefits are large. Otherwise, both talented and weak appointees may provide excess policy concessions to bureaucrats.

Proposition 1.6 *(Appointee Capture) Let $b_h > \bar{b}_h$. Only weak appointees are captured if management problems are sufficiently likely to be hard and officeholding benefits are large (i.e., $\beta \geq \bar{\beta}$, $\rho > \hat{\rho}$). Only talented appointees are captured if officeholding benefits are not too large (i.e., either $\beta \geq \bar{\beta}$, $\rho < \hat{\rho}$, $b_h < \hat{b}$ or $\beta < \bar{\beta}$, $\rho < \tilde{\rho}$). Otherwise, both talented and weak appointees are captured.*

Appointee Turnover   Now, I consider the relationship between underlying political conditions and appointee turnover. If there is a sufficiently high likelihood of substantial disagreement (i.e., $\beta \geq \bar{\beta}$ and $b_h > \bar{b}_h$) and officeholding is sufficiently valuable (i.e., $\rho > \hat{\rho}$), then weak appointees facing easy management problems are captured. In this equilibrium, the president always retains talented appointees and dismisses weak appointees that face hard management problems. However, the president also retains weak appointees that face easy management problems if they generate policy success with the captured policy. This means turnover increases as the likelihood the bureaucracy is hostile increases and as the weak appointee is a worse manager. Proposition 1.7 states this formally.

Proposition 1.7 *(Appointee Turnover) Let $b_h > \bar{b}_h$, $\beta \geq \bar{\beta}$, and $\rho > \hat{\rho}$. Then, in the equilibrium that maximizes the president's welfare, an appointee is retained (i.e., $r^* = 1$) only if policy implementation is successful (i.e., $y = 1$) and $x = 0$ or $x = b_h - (1 - c)$. The equilibrium probability the first period appointee is dismissed increases as*

- *the likelihood the bureaucracy is hostile increases ($\beta \to 1$);*

- *the weak appointee's managerial talent decreases ($\theta_l \to 0$).*

1.6 Conclusion

This chapter explores how the management issues appointees confront and appointee's desires to demonstrate strong management skill affect presidential control over policy. I argue that appointees' reputation concerns may lead them to shift policy towards bureaucrats at the expense of presidential control, even when they share the administration's policy preferences.

While presidents seek to retain only managers capable of preserving control over the bureaucracy, the model demonstrates that presidents who observe concessions to the bureaucracy may face a difficult inference problem. In particular, the president is uncertain whether the loss of control is due to an appointee's poor management or due to a difficult management problem.

Weak managers may exploit the fact that strong managers must sometimes provide policy concessions to career bureaucrats in order to ensure cooperation with the administration's policies. However, this can lead even skilled managers to select policy more aligned with the bureaucrat's interests in order to differentiate themselves from weak managers. In equilibrium, both skilled and weak managers may pursue policies that benefit bureaucratic interests at the expense of the administration.

The results highlight structural impediments to presidential control that cannot be addressed through administrative means: these issues cannot be avoided by appointing allies. In doing so, the results reinforce that organizational structures powerfully affect political outcomes.

C h a p t e r   2

APPOINTEES AS POLICY EXPERTS: DELEGATING AUTHORITY

Modern presidents, in particular, have understood that the ability to staff lower levels of the federal bureaucracy is crucial tool for maintaining presidential control over policymaking. President Kennedy believed that career bureaucrats would be unable to act energetically enough (Wills 1982). Because of this, Kennedy relied on temporary task forces rather than using typical bureaucratic routes (Pfiffner 1987). The Reagan administration went even further—many Reagan appointees sought to exclude career executives from policymaking discussions from the outset based on fears that career officials would undermine administration's policies (Carroll 1987; Pfiffner 1987).

Given both the scrutiny appointees are subjected to and their importance as substitutes for the bureaucracy in the policymaking process, appointees must cultivate a reputation for competence in order to maintain their position within an administration. Central to appointees' reputation concerns is whether or not they have the expertise to "go it alone" instead of yielding to the expertise of career bureaucrats whose policy views often differ from those of the president. Pendleton James, who served as Director of Reagan's Presidential Personnel Office, explained, "We handled all the apppointments: boards, commissions, Schedule C's, ambassadorships, judgeships. . . if you are going to run the government, you've got to control the people that come into it" (quoted in Pfiffner 1987). This suggests that the need to demonstrate independence from career bureaucrats may powerfully affect interactions between appointees and bureaucrats.

2.1 Introduction

At a broad level, this chapter explores how the possibility of removal conditions interactions between political appointees and the career bureaucrats. I argue that removal authority changes the agency problem between the president and her appointees in a subtle but important way. Assuming appointees wish to be retained, how removal authority affects appointee behavior depends on an appointee's ideological alignment with the president. In particular, ally appointees subject to political removals may not draw on the expertise of career bureaucrats if doing so

reveals they lack the expertise to determine policy themselves as this jeopardizes their retention prospects. In contrast, even expert non-ally appointees face removal by the executive which undermines their incentives to improve their reputation at the expense of policy. This creates a tradeoff between ideological alignment and informed policymaking that affects presidential appointments.

To develop this argument, I consider a two-period model of policymaking in which the president selects and oversees a political appointee who can either delegate to a subordinate career bureaucrat or determine policy himself. The president selects the appointee on the basis of a known ideology and oversees the appointee. Based on her oversight, the president can remove the appointee—this captures the president's formal removal authority—whereas career bureaucrats are not subject to political removals and remain in office in each period. All actors have commonly known spatial preferences over policy outcomes.[1] The bureaucrat's expertise about policy effects is also common knowledge (H. Kaufman 1956; S. Gailmard and Patty 2007), but the appointee's expertise—or capability to competently determine policy—is his private information. This reflects that an appointee's ability may be assessed on the job and that, for many job candidates, public information about competence is limited.

I assume that appointee expertise is independently and identically distributed across appointee ideologies such that initially there is no tradeoff between an appointee's partisanship and his expertise. In the model, an appointee's expertise represents his competence as it affects the appointee's ability to independently execute policy.[2] Appointees are either experts or non-experts: expert appointees are as informed as the bureaucrat, whereas non-expert appointees are less informed. This means expert appointees never benefit from bureaucratic expertise, while non-experts always benefit provided they are sufficiently aligned with the bureaucrat. Nevertheless, if expert appointees possess the expertise to determine policy themselves, then delegating authority to the bureaucrat may reveal that an appointee lacks expertise.

A central point of the model is that a political appointee subject to removal may face "career concerns" (Holmström 1999) to manipulate the president's belief about his

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[1]This contrasts with Fox and Jordan (2011), who consider the possibility that delegation reveals information about the ideological congruence of politicians with voters. In their model, politicians will use bureaucratic agents to create policy to avoid responsibility for unfavorable outcomes.

[2]In this model, appointee expertise is expertise about policy. When I discuss an appointee's "competence" in the context of this model, I mean an appointee's policy expertise. Other analyses have differentiated between "policy" expertise and managerial expertise (e.g., George A. Krause and O'Connell 2016).

ability through his delegation decision.[3] In contrast with previous work which argues that the development of bureaucratic expertise inevitably created more reliance on bureaucrats (Niskanen 1971; Miller and T. M. Moe 1983), this concern suggests possibly too little reliance on careerist experts. The usual explanation for this is that the ideological biases of career bureaucrats prevent such reliance (e.g., T. Moe 1985; Lewis 2010). However, I argue that an appointee's reputation incentives may undermine delegation to expert career civil servants—even when delegation improves policy outcomes from both the appointee and president's perspectives.

After identifying this insight, I show how an appointee's desire to demonstrate expertise affects presidential appointments. The main result is that if career bureaucrats are not too biased the president selects a non-ally appointee in the first period in order to encourage reliance on bureaucratic expertise by non-experts that prefer delegation. Because the president cannot commit to remove expert allies, whereas she can commit to remove expert non-allies, reputation concerns create more distortion in the delegation decisions of appointees closely aligned with the president. By selecting non-ally appointees, the president credibly commits to sometimes dismiss appointees even if they demonstrate high expertise. If the president is willing to dismiss even experts, the policy cost to non-expert appointees of forgoing delegation outweighs the potential reputation benefit. In equilibrium, the president selects the appointee ideology that maximizes first period discipline—an appointee for which retention is sequentially rational only if the president is certain the appointee is an expert. This enables the president to commit to stringent retention criteria, which facilitates delegation to better-informed career bureaucrats by non-expert appointees.

In contrast, the president always selects an ally appointee in the second period when removal is impossible. This pattern of appointments is consistent with anecdotal and empirical evidence (George A. Krause and O'Connell 2016) that suggests that presidents place more importance on loyalty as their terms progress. For instance, President Nixon sought to appoint loyalists in his second term, whereas in his first term, he appointed officials with broad support (Nathan 1983).

While the president prefers allies to non-allies all else equal, an appointee's competence may compensate for lack of ideological alignment. Previous work highlights this tradeoff between loyalty to the president's policy agenda and competence in presidential appointments (e.g., Lewis 2010; George A. Krause and O'Connell 2019)

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[3]Standard models conceives of delegation to career bureaucrats as necessary to ensure informed policymaking (Epstein and O'Halloran 1994; Epstein and O'Halloran 1999), whereas non-delegation represents a mechanism for control in view of policy disagreement (Lewis 2010).

attributing this tradeoff to finite applicant pools and labor market constraints (Lewis 2011;George A. Krause and O'Connell 2019) or incentives to acquire costly expertise (S. Gailmard and Patty 2007). In contrast, this chapter connects the personal career incentives of appointees to incentives to demonstrate expertise: the level of competence an appointee must demonstrate in order to remain in government depends on the appointee's ideology which affects the credibility of removal.

This chapter makes several contributions. First, it demonstrates how appointment and removal powers interact to influence executive policymaking. Second, it distinguishes between an appointee's preferences and his behavior in office when subject to political removal. Third, it provides new insights into the tradeoff between ideological alignment and competence in presidential appointments—in particular how appointee ideology evolves over terms. Finally, it highlights that successful policymaking requires coordination between politicians and bureaucrats whose strategic incentives potentially diverge. This issue has been highlighted in a growing body of literature that considers multi-tier agency problems in the executive branch and suggests that bureaucrats may either improve (Foarta 2021) or exacerbate (Li, Sasso, and Turner 2021) electoral control of politicians through their strategic behavior.

Appointee Partisanship. A large literature examines how the appointment process influences both the composition of executive agencies and the structure of power between political appointees and career bureaucrats in ways which affect the president's ability to achieve her policy objectives (Lewis 2011). This literature argues that modern presidents have increasingly looked to the political appointment process to centralize authority over policy (T. Moe 1985; T. M. Moe and S. A. Wilson 1994; Lewis 2010). Many scholars have argued that by strategically appointing political allies—appointees that share the president's policy objectives—presidents have asserted more control over executive policymaking (T. Moe 1985; Aberbach and Rockman 2000; Lewis 2005; Lewis 2010).

Yet, in practice, the policy stances of political appointees do not necessarily coincide with those of the president. For instance, A. M. Bertelli and Grose (2009) find evidence that appointees' ideologies differ significantly from the ideological views of the president. Similarly, George A. Krause and O'Connell (2019) demonstrate that political appointees vary in their competence and ideological alignment with the president. George A. Krause and O'Connell (2016) further demonstrate that the ideology of appointees evolve with the administration's tenure.

Formal explanations for ideological divergence between the president and her appointees argue that presidents are motivated by both policy and patronage goals which may be furthered by appointing non-allies (A. Bertelli and Feldmann 2007) in view of strategic interactions with other branches of government (McCarty 2004). The logic underlying these models is that non-ally appointees balance the president's interests against the competing interests of either organized interest groups (A. Bertelli and Feldmann 2007) or Congress (McCarty 2004). While these models highlight the influence of actors external to the executive branch on presidential appointments, I present a strategic rationale for non-ally appointments based solely on forces within the executive branch.

Loyalty or Competence.   The tension between loyalty and competence is central to understanding presidential appointments and, more generally, administrative policymaking.[4] This tradeoff has been well documented empirically. Constructing a continuous measure of loyalty and competence, Richard W. Waterman and Ouyang (2020) show that few appointees obtain both high loyalty and competence scores.

Recent empirical work examines how presidents resolve the tradeoff between loyalty and competence in practice. George A. Krause and O'Connell (2019) show that loyalty-competence tradeoffs are more significant with respect to policy expertise than for general managerial talent. Presidents tend to value loyalty more in their top-level appointees, whereas lower-level officials possess greater managerial talent and policy expertise (George A. Krause and O'Connell 2016). However, Richard W. Waterman and Ouyang (2020) find that presidents emphasize competence in presidential nomination and Senate confirmation (PAS) and Senior Executive Service (SES) appointments.

While the loyalty-competence tradeoff is generally attributed to labor market constraints (e.g., finite applicant pools) or, in the context of career bureaucrats, incentives to acquire costly expertise (S. Gailmard and Patty 2007), I highlight how the appointee's ideology shapes the agency problem the president faces with her appointee. The nature of the agency problem between the president and appointee affects the president's ability to learn about an appointee's expertise during his tenure.

This analysis differentiates between pure preference alignment and "real" loyalty amongst political appointees. The key distinction is that real loyalty derives from

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[4]The tradeoff between loyalty and competence has been studied in other settings, including authoritarian regimes (e.g., Egorov and Sonin 2011).

an appointee's behavior in office. While T. Moe (1985) argues that presidents have increasingly sought to install loyal appointees in order to gain control over policy, this analysis shows that the logic underlying the desire to appoint loyalists potentially conflates appointee preferences with behavior: loyalists are valuable to the president because they act in accordance with the president's preferences, which they share. This logic may fail to describe appointee behavior if appointees are subject to removal and retention is sufficiently valuable. This is because the accountability relationship between the president and even loyal appointees—or as I show, in particular for loyal appointees—places the president's policy goals in conflict with personal career incentives. The analysis demonstrates that selecting appointees on the basis of loyalty potentially leads to worse behavior in office.

This result is most similar to the logic in Kenneth W. Shotts and Wiseman (2010), which examines how the threat of removal affects an appointee's investigative effort. Kenneth W. Shotts and Wiseman (2010) similarly find that the threat of removal is most effective when the appointee is unaligned with the executive, whereas if the appointee is aligned with the executive the threat of replacement can lead appointees to behave "dogmatically," undermining the executive's policy interests. This result echoes results in Levy (2000) and Levy (2004) in which reputation concerns undermine information provision. However, I find that the president always replaces appointees with ideological allies in the second period when she cannot credibly threaten removal.

2.2 A Model of Political Appointments with Executive Oversight

I consider a two-period model of policymaking, in which the president (E) both selects and oversees a political appointee (P). In each period $t = 1, 2$, the political appointee must decide whether to retain decision-making authority or delegate decision-making authority to a perfectly informed but biased expert bureaucrat (A). The appointee's first period delegation decision conveys information about the appointee's own expertise to the president that decides whether to remove or retain him.[5]

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[5]Throughout I use the terms agent and bureaucrat interchangeably to refer to career bureaucrats in the executive branch who are not subject to political removal. Similarly, I use the terms president and executive to refer to the principal that exercises removal authority. The more general terms reinforce that this accountability arrangement may be generalized to other contexts beyond the United States federal executive branch.

Formal Description

In each period, there is an ex ante unknown state of the world, $\omega_t \in \Omega = [0, 1]$, which represents underlying political conditions that affect policy outcomes. The common prior belief is that the state of the world, ω_t, is distributed uniformly over the interval $[0, 1]$, independent across periods. The bureaucrat observes the state of the world ω_t prior to policymaking. This captures that the bureaucrat is an expert, as he is always informed when choosing policy. The bureaucrat's expertise is common knowledge.

Political appointees are either experts ($\theta_P = \theta_h$) or non-experts ($\theta_P = \theta_l$). An appointee's type is his private information, and determines the probability the appointee is informed of the state prior to policymaking. With probability θ_P an appointee is informed of ω_t, and with probability $1 - \theta_P$ an appointee is uninformed. If the appointee is uninformed, he does not possess policy relevant private information beyond the prior distribution of ω_t. This guarantees that an uninformed appointee is no more knowledgable than the president.

I assume that an expert appointee is as informed as the expert bureaucrat: $\theta_h = 1$. In other words, there is no information asymmetry between an expert appointee and the bureaucratic agent, as both observe ω_t directly. In contrast, I assume a non-expert appointee is less likely to be informed with $\theta_l \in [0, 1)$. This reflects that a non-expert appointee is ex ante less likely than an expert appointee to be aware of the appropriate policy to pursue.

In each policymaking period, the appointee either delegates policymaking authority to the agent ($d_t = 1$) or retains policymaking authority ($d_t = 0$). If the appointee retains policymaking authority ($d_t = 0$), he then selects policy $y_t \in \mathbb{R}$. If instead the agent holds policymaking authority ($d_t = 1$), then the agent determines the policy $y_t \in \mathbb{R}$.

The president observes the appointee's delegation decision in each period, d_t. This is equivalent to assuming the president observes the identity of the decision-maker. I discuss the substantive basis for this assumption in more detail following the model exposition.

Following the first period and after observing the appointee's delegation decision, the president decides to either retain ($r = 1$) or remove ($r = 0$) the appointee. I assume that an appointee's expertise is independent of his ideology. The common prior belief that an untried replacement appointee is an expert is given by $\kappa \in (0, \tilde{\kappa})$

where $\tilde{\kappa} = \frac{\sqrt{3}}{2}$.[6] At the conclusion of the second policymaking period payoffs are realized and the interaction ends.

Sequence. In each policymaking period t, the sequence is as follows:

1. If $t = 1$ or $r = 0$, the president (E) selects an appointee with commonly known bias $b_P \in \mathbb{R}$.

2. Nature draws the state of the world $\omega_t \in [0, 1]$ and the untried appointee's expertise $\theta_P \in \{\theta_l, 1\}$.

3. The appointee (P) observes his expertise, θ_P.

4. The appointee retains policymaking authority ($d_t = 0$) or delegates ($d_t = 1$) authority to the bureaucratic agent (A).

5.   a) If P retains policymaking authority ($d_t = 0$),

      i. With probability θ_P P is perfectly informed of the state ($s_t^P = \omega_t$), whereas with probability $1 - \theta_P$ P is uninformed of the state ($s_t^P = \emptyset$).

      ii. P selects policy $y_t \in \mathbb{R}$.

   b) If P delegates ($d_t = 1$),

      i. A is informed of the state ($s_t^A = \omega_t$).

      ii. A selects policy $y_t \in \mathbb{R}$.

6. E observes d_t.

Payoffs. The president obtains utility from policy in each period according to

$$u_t^E = -(y_t - \omega_t)^2,$$

whereas the appointee and the bureaucrat obtain utility from policy equal to

$$u_t^i = -(y_t - \omega_t - b_i)^2.$$

This assumes, without loss of generality, that the president prefers that policy correspond exactly with ω_t. Both the bureaucrat's bias, b_A, and an appointee's bias, b_P, are common knowledge. The bureaucrat does not share the president's policy

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[6]This assumption ensures there is a substantial tradeoff between ideology and expertise. The analysis is similar if untried first period appointees are of higher competence than the pool of second period replacements.

preferences, or $b_A > 0$. This reflects a standard assumption in delegation models: that career bureaucrats may be more informed, but are also biased relative to the preferences of the president. I refer to an appointee as an ally of the president if $b_P = 0$.

I assume that appointees obtain utility from policy in each period irrespective of whether or not they hold office. In addition, the appointee obtains a payoff τ in each period in which he holds office. The parameter τ represents pure officeholding benefits which are distinct from the policy benefits of officeholding. Throughout I assume that the pure officeholding benefits are sufficiently large or $\tau > \bar{\tau}$. If appointees place little value on office-holding ($\tau \leq \bar{\tau}$), then non-expert appointees would prefer dismissal to the policy distortions necessary to gain retention. In such cases, non-expert appointees would prefer to exit government and the president would not face an agency problem with ally appointees. Assumption 2.1 provides a formal definition of $\bar{\tau}$. I also assume a common discount factor $\delta \in (0, 1)$.

Strategies and Information. Prior to the election the president observes the appointee's delegation decision. Based on the appointee's delegation decision, the president forms beliefs about the appointee's level of competence, given by $\hat{\kappa}(d_1, b_P) : d_1 \times b_P \to [0, 1]$, which assign for each possible first period delegation decision $d_1 \in \{0, 1\}$ and appointee ideology, a probability that the appointee is an expert ($\theta_P = 1$).

A strategy for the president is a choice of appointee ideology b_P in the first period or in the second period, following removal, $\beta_t^P : t \to \mathbb{R}$, and a probability of retaining the first period appointee given the president's information, or $\rho(d_1, \beta_P) : d_1 \times b_P \to [0, 1]$.

A strategy for the bureaucrat is a policy action given the his private information, ω_t, provided he is delegated to (i.e., $d_t = 1$), or $y_t : 1 \times \omega_t \to \mathbb{R}$. I denote the agent's strategy by $y(1) \equiv (y_1(1, \cdot), y_2(1, \cdot))$. A strategy for the appointee is a probability of delegation (i.e., $d_t = 1$) given his type $\theta_P \in \{\theta_l, 1\} \times b_P$, or $\sigma_t : \theta_P \times b_P \to [0, 1]$, and a policy choice $y_t : 0 \times s_t^P \to \mathbb{R}$ if he retains decision-making authority (i.e., $d_t = 0$).

Discussion

There are three basic premises of the model. First, presidents care about the competence of their appointees. Second, appointee competence is not fully known

at the time of appointment. Third, the president uses both the information available and the institutional tools at her disposable to promote competence amongst her appointees. I discuss each of these assumptions in turn.

A Preference for Competence. Presidents seek to install political appointees that will effectively carry out their policy agenda. As Clay Johnson, George W. Bush's first director of presidential personnel, made plain in a personnel document, "This is not a beauty contest. The goal is to pick the person who has the greatest chance of accomplishing what the principal wants done" (Lewis 2010, p. 27). Because political appointments have been used to exert control over bureaucratic policymaking (B. Dan Wood and Richard W. Waterman 1991b), many scholars have argued that competent appointees are better able to support presidential programs (Mann 1964; Edwards 2001). To maintain control over policymaking, T. Moe (1985) argues that presidents value "responsive competence" in their appointees.

Upper-tier political appointees, in particular, are able to exert substantial influence over policymaking (see H. A. Kaufman 1981; J. Q. Wilson 1995). Therefore, ensuring that these appointees have the ability to effectively execute policy is critical for influencing bureaucratic policymaking. In the words of a congressional staffer:

> White House people are generally quite sincere when they say they want good people. They tend to realize—to a greater or lesser extent—that the success of their administration depends on getting high-quality people. . . (Heclo 1977, p. 95)

Moreover, as presidents are held accountable for government performance (T. M. Moe and S. A. Wilson 1994), the president seeks to appoint individuals that are able to ". . . manage, design, and effectively carry out new programs, implement key legislation, or deliver services" (Edwards 2001, p. 15).

Uncertainty about Appointee Competence. Though presidents have long recognized the value of competent appointees, ensuring recruitment of qualified appointees in practice is another matter—especially given the large number of vacancies the president is expected to fill (Lewis 2010). Given the immense demands of the appointment process, presidential aides tasked with recommending qualified applicants may place less emphasis on expertise than on simply filling a vacancy.

As a Reagan aide stated, "As far as I'm concerned anyone who supported Reagan is competent" (Lewis 2010, p. 27).

While an appointee's partisan sympathies may be reasonably divined from previous involvement with political campaigns, an appointee's competence or expertise is often more difficult to discern. This problem is exacerbated by the influx of young appointees whose past experience is limited. For instance, finding qualified applicants to fill lower level subcabinet vacancies is often difficult and these posts are increasingly filled by young and relatively inexperienced candidates (Pfiffner 1987).

These observations reinforce that the selection process does not necessarily identify the most qualified applicants ex ante. This suggests that there is scope to reassess an appointee's capabilities based on performance on-the-job. I incorporate this tension into the model by assuming that the executive is uncertain of the appointee's ability, modeled as the likelihood the appointee understands underlying political conditions when selecting policy. This simply reflects that there is residual uncertainty about the appointee's officeholding qualifications that may be revealed post-appointment.

Promoting Appointee Competence. In this model, the president generates accountability to her policy preferences by either removing or retaining the political appointee. I assume that the president bases retention decisions on appointees' formal participation in the policymaking process—rather than the appointee's policy decisions which are unobserved (Acs 2018; Potter 2019).

Policy choices and, per force, policy effects take years to materialize as policymaking "rarely seems to involve a group of political executives walking in, thumping the table, and giving the administration's marching orders" (Heclo 1977, p. 178). Rather, more often policymaking is characterized by "a continuing dialogue in which bureaucrats are important participants" (Heclo 1977, p. 178).

As a result, presidents may look to the policymaking process for information about an appointee's ability. This attention to interactions between political appointees and career civil servants is captured by Heclo (1977): "Weaknesses among political executives lead inevitably to White House complaints" about their cooptation by the permanent bureaucrats they were supposed to oversee (p. 111). President Nixon memorably complained about a member of his Cabinet, "rather than running the bureaucracy, the bureaucracy runs him."[7] This illustrates that appointees' dealings with career bureaucrats are subject to executive scrutiny.

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[7] https://www.nytimes.com/1979/08/12/archives/conflict-over-the-cabinet-cabinet.html

The president can see which actors are exercising leadership in developing policy long before she can observe the actor's policy choice or the effects of the policy. Given demands on the president, presidents have to act quickly on the best information they have when they have it; they cannot necessarily afford to wait to see policy results materialize. Moreover, from a purely theoretical standpoint, the appointee's delegation decision provides useful information to the president. Even if the president were to observe policy, observing the extent of an appointee's involvement in the policymaking process provides additional information that helps the president discriminate amongst appointees at the retention stage.

In practice, few early appointees continue to serve deep into presidential administrations. In recent administrations, only 11% of high-level appointees continued to serve throughout the president's second term.[8] This trend also appears to hold for lower level appointments whose tenure in government is brief.

2.3   Analysis

The equilibrium analysis considers perfect Bayesian equilibria (PBE) in which beliefs satisfy the D1 criterion (Banks and Sobel 1987). This implies that players' actions are consistent with their beliefs and beliefs are derived using Bayes' Rule when possible. Off the equilibrium path, beliefs assign positive probability only to the type of appointee that benefits from the deviation (in terms of generating a greater payoff relative to her equilibrium expected payoff) for a larger subset of possible off path retention probabilities by the executive. This implies that off-path delegation causes the executive to infer that the appointee is inexpert, whereas off-path leadership causes the executive to infer that the appointee is expert.[9]

The D1 refinement preserves pooling equilibria that would be ruled out by off-path beliefs that assign greater probability following off-path actions to types that intrinsically dislike the action, while eliminating pooling equilibria in which each type of appointee takes the action preferred by the executive's least preferred type. For instance, absent this refinement, an appointee could prefer to deviate to off-path actions intrinsically less appealing to her type in order to signal her expertise to the executive (e.g., an expert appointee delegating to signal her expertise). Alternatively, without this refinement, there exist equilibria in which both experts and non-experts

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[8]https://presidentialtransition.org/wp-content/uploads/sites/6/2019/11/Turnover-Report₁1.7.19.*pdf*

[9]This holds for the parameter regions considered in the analysis. If office-holding benefits are low enough, off-path delegation would cause the executive to infer the appointee is expert.

delegate even if each prefers to exercise policy leadership. This occurs only if retention benefits are sufficiently large and off-path the executive believes non-expert appointees are more likely to determine policy themselves.

An equilibrium is given by $(\sigma^*, y^*, \beta^*, \rho^*, \kappa^*)$. In equilibrium, the executive infers the expertise of the appointee and retains the first period appointee on the basis of these beliefs, κ^*, according to ρ^*. Each type of appointee selects a probability of delegation σ^* understanding the inference the executive will draw based on her information, d_t. Proofs for all formal results are given in Appendix B.1. Appendix B.2 provides proofs for statements of uniqueness, while Appendix B.3 provides conditions on equilibrium appointee strategies: that in any PBE at most one type of appointee is indifferent between delegating authority and exercising leadership. This implies that in any PBE, appointees use either fully pooling, fully separating, or semi-separating strategies in the first period. If either type of appointee is indifferent between delegating authority and exercising policy leadership in a PBE, the equilibrium is semi-separating.

Policymaking

I first consider how policy is chosen in each period for a given allocation of formal decision-making authority. I use the term policymaking to refer to the choice of policy y_t in each period, whereas the delegation decision, d_t, refers to the authority to select policy y_t. The delegation decision will determine the identity of the policymaker in each period—if the appointee delegates to the bureaucrat ($d_t = 1$) the bureaucrat selects policy, whereas if the appointee retains authority ($d_t = 0$) he selects policy himself.

The executive retains the appointee based on the delegation decision, which indicates the appointee's involvement in the policymaking process. The extent to which the appointee relies on the bureaucrat to make policy potentially conveys information about the appointee's level of expertise as less expert appointees have more to gain by transferring policy authority to a better informed bureaucrat. Given that the executive does not observe policy choices or outcomes, she cannot condition her retention decisions on policy performance. As a result, the policy choice does not impact the appointee's retention prospects. Conditional on a distribution of formal policymaking authority, the policy choice only impacts each actors' utility in that period.

This observation has two important implications for this analysis. First, policymak-

ing incentives for both the appointee and the bureaucrat are identical in each period. Second, the policymaker does not have an incentive to distort his policy choice. This means that in each period policies will reflect both the bias and information of the policymaker—the actor that determines policy will select his preferred policy given the information available to him and his ideology. Specifically, in each period, the agent will select policy according to

$$y_t^*(1, \omega_t) = \omega_t + b_A, \tag{2.1}$$

whereas the appointee will select policy according to

$$y_t^*(0, s_t^P) = \begin{cases} s_t^P + b_P & \text{if } s_t^P \in \{0, 1\} \\ \mathbb{E}(\omega_t) + b_P & \text{if } s_t^P = \emptyset. \end{cases} \tag{2.2}$$

If the executive were able to observe the appointee's policy choice in addition to the delegation decision, an uninformed appointee may face incentives to signal ability through his policy choice. I do not consider this case here. Instead, I focus on the appointee's incentives to signal ability purely through the distribution of formal decision-making authority.

Delegation without Reputation Concerns

To understand the reputation incentives executive oversight and the possibility of removal introduce for political appointees, I first analyze an appointee's delegation behavior in the absence of retention incentives. This corresponds to the equilibrium delegation behavior in the second period and provides a baseline for comparison.

Absent retention concerns, an appointee's delegation decision is purely guided by his ideology and level of expertise. An appointee is only willing to delegate decision-making authority to the bureaucrat if the benefits of informed policymaking outweigh the costs of worse control over policy choice. Thus, an appointee is willing to delegate only if

$$-(b_A - b_P)^2 \geq -(1 - \theta_P)\text{Var}(\omega_t) \Rightarrow b_A - \epsilon(\theta_P) \leq b_P \leq b_A + \epsilon(\theta_P) \tag{2.3}$$

where $\epsilon(\theta_P) \equiv [(1 - \theta_P)\text{Var}(\omega_t)]^{\frac{1}{2}}$.[10] This reflects a standard tradeoff in delegation decisions: a principal cannot gain from a biased agent's expertise without some loss of control.

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[10]To simplify notation, going forward I omit the subscript t when referring to distributional properties of the random variable ω_1 or ω_2, as $\mathbb{E}(\omega_1) = \mathbb{E}(\omega_2)$ and $\text{Var}(\omega_1) = \text{Var}(\omega_2)$.

As expert appointees have access to the same information as the bureaucrat when determining policy, only non-expert appointees sufficiently aligned with the bureaucrat will have a strict incentive to delegate given $\theta_l \in [0, 1)$. Definition 2.1 defines the set of appointee biases for which delegation yields a weakly greater second period expected utility for a non-expert appointee. Lemma 2.1 states the second period delegation behavior for each type of appointee.

Definition 2.1 $\Delta^* \equiv [b_A - \epsilon(\theta_l), b_A + \epsilon(\theta_l)]$

Lemma 2.1 *(Second Period Delegation) In the second period, an expert appointee retains decision-making authority (i.e., $\sigma_2^*(1, b_P) = 0$), whereas a non-expert appointee delegates if and only if he is sufficiently aligned with the bureaucrat, or*

$$\sigma_2^*(\theta_l, b_P) = \begin{cases} 1 & \text{if } b_P \in \Delta^* \\ 0 & \text{otherwise.} \end{cases} \tag{2.4}$$

Based on the delegation behavior described in Lemma 2.1, I identify two different configurations of bureaucratic bias. Definition 2.2 uses an ally appointee's ($b_P = 0$) delegation decision to characterize a bureaucrat as either moderate or extreme. A bureaucrat is moderate if, absent career concerns, non-expert ally appointees prefer to delegate to the bureaucrat. A bureaucrat is extreme if, instead, non-expert ally appointees prefer to determine policy themselves, rather than delegate to the bureaucrat. Given the ally holds the same policy preferences as the executive, the threshold also reflects the executive's preferences over an ally appointee's behavior while in office.

Definition 2.2 *The bureaucrat is said to be moderate if $b_A \leq \epsilon(\theta_l)$ and extreme if $b_A > \epsilon(\theta_l)$.*

Appointee Selection ($t = 2$). Next I consider the executive's preferences over appointee ideology in the second period when the appointee is not subject to removal. To understand the executive's preferences over the ideology of her appointees in the second period, first consider the utility each type of political appointee generates. An expert appointee always exercises policy leadership, whereas a non-expert appointee delegates only if he is sufficiently aligned with the bureaucratic agent.

In the second period, appointees do not face reputation incentives to demonstrate expertise and, as a consequence, do not distort their delegation decisions from what

is policy-optimal based on their own expertise and ideology. Furthermore, there is no tradeoff between ideology and expertise in the second period: all appointees have the same expected competence κ, and there is no benefit from learning about an appointee's competence on the job. Therefore, the executive's expected utility from an untried political appointee is

$$\mathbb{E}u_2^E(b_P; b_A) = \begin{cases} -\kappa b_P^2 - (1-\kappa)b_A^2 & \text{if } b_P \in \Delta^* \\ -b_P^2 - (1-\kappa)(1-\theta_l)\text{Var}(\omega) & \text{if } b_P \notin \Delta^*. \end{cases} \tag{2.5}$$

For either configuration of bureaucratic preferences, each type of ally appointee chooses the executive's preferred action given his type. If the bureaucrat is moderate, appointing an ally ensures reliance on bureaucratic expertise by non-experts without inflicting the cost of known policy disagreement if the appointee is an expert. If the bureaucrat is extreme, appointing an ally ensures a non-expert appointee does not transfer authority to the bureaucrat while minimizing the cost of known policy disagreement with her appointees. This means the executive will always replace a removed appointee with an ideological ally. Lemma 2.2 formally states this result.

Lemma 2.2 *(Replacing an Appointee) If the first period appointee is removed (i.e., $r = 0$), the executive replaces the removed appointee with an ideological ally, $\beta_2^{P*} = 0$.*

Lemma 2.2 allows the analysis to be simplified to consider just the optimal appointee ideology in the first period, given that the executive always replaces a removed appointee with an ideological ally. The second period appointee selection behavior reflects a standard logic in the political appointments literature: a president utilizes the political appointment process to install ally appointees loyal to the president's policy agenda.

This highlights the importance of loyalty when appointees do not face reputation incentives. When appointing a replacement, the president does not face a tradeoff between ideology and control. In general, the president will only be willing to appoint a non-ally if doing so furthers her control over policymaking. This tension between ideology and control arises in the first period when appointees face reputation concerns to demonstrate expertise that vary by ideology.

Removal Decision

Given the second period behavior described, an executive will remove an appointee if the expected utility from replacing the appointee exceeds the expected utility from

retaining the appointee. The executive's expected utility from removing the first period appointee is given by

$$\mathbb{E}u_2^E(\text{remove}) = \begin{cases} -(1-\kappa)b_A^2 & \text{if } b_A \leq \epsilon(\theta_l) \\ -(1-\kappa)(1-\theta_l)\text{Var}(\omega) & \text{if } b_A > \epsilon(\theta_l), \end{cases} \quad (2.6)$$

whereas his expected utility from retaining the first period appointee is

$$\mathbb{E}u_2^E(\text{retain}; \hat{\kappa}) = \begin{cases} -\hat{\kappa}b_P^2 - (1-\hat{\kappa})b_A^2 & \text{if } b_P \in \Delta^* \\ -b_P^2 - (1-\hat{\kappa})(1-\theta_l)\text{Var}(\omega) & \text{if } b_P \notin \Delta^* \end{cases} \quad (2.7)$$

where $\hat{\kappa}$ represents the executive's posterior belief that the first period appointee is an expert.

Remark 2 characterizes the executive's posterior beliefs for any strategy profile in which experts always determine policy themselves. This formalizes a key strategic tension in the model: a non-expert appointee may improve his reputation by determining policy himself. Nevertheless, competence alone is insufficient to guarantee retention. Instead, both the executive's beliefs that an appointee is competent and the extent of ideological alignment between the executive and appointee jointly determine retention.

Remark 2 (Executive Beliefs) Suppose expert appointees always determine policy themselves (i.e., $\sigma_1^*(1, b_P) = 0$) and non-expert appointees sometimes delegate (i.e., $\sigma_1^*(\theta_l, b_P) \in (0, 1]$). Then, the executive's equilibrium posterior beliefs are given by

$$\kappa^*(d_1, b_P) = \frac{\kappa}{\kappa + (1-\kappa)(1-\sigma_1^*(\theta_l, b_P))} \quad \text{if } d_1 = 0 \quad (2.8)$$
$$0 \quad \text{otherwise.}$$

(2.9)

If both expert and non-expert appointees determine policy themselves (i.e., $\sigma_1^*(1, b_P) = \sigma_1^*(\theta_l, b_P) = 0$), then $\kappa^*(0, b_P) = \kappa$.

If an appointee is too ideologically extreme, then the cost of ideological disagreement outweighs the possible benefits of competence. Lemma 2.3 provides a formal statement of this intuition. Definition 2.3 defines the set of appointee biases that may possibly be retained with positive probability in an equilibrium, $\mathfrak{R}$. If $b_P \notin \mathfrak{R}$, then no belief $\hat{\kappa} \in [0, 1]$ would lead the executive to retain the appointee.

Lemma 2.3 *There exists $\hat{\kappa} \in [0,1]$ such that it is sequentially rational for the executive to retain the appointee if and only if*

- *the bureaucrat is moderate and $-b_A\sqrt{1-\kappa} \leq b_P \leq b_A\sqrt{1-\kappa}$; or*

- *the bureaucrat is extreme and $-\epsilon(\theta_l)\sqrt{(1-\kappa)} \leq b_P \leq \epsilon(\theta_l)\sqrt{(1-\kappa)}$.*

Definition 2.3 $\Re \equiv [-\min\{b_A, \epsilon(\theta_l)\}\sqrt{1-\kappa}, \min\{b_A, \epsilon(\theta_l)\}\sqrt{1-\kappa}]$

Provided an appointee is sufficiently aligned with the executive (i.e., $b_P \in \Re$), the appointee's expertise may compensate the executive for worse ideological alignment. While the executive prefers allies all else equal, she will prefer an expert non-ally to a less expert ally. If $b_P \in \Re$, the executive will only retain an appointee that is sufficiently expert, or $\hat{\kappa} \geq \overline{\kappa}$. Lemma 2.4 provides a formal statement of the level of expertise an appointee must demonstrate in order to be retained with positive probability in equilibrium, $\overline{\kappa}$. This retention threshold varies based on the ideological alignment between the president and her appointee, as well as the ideology of the bureaucrat.

Lemma 2.4 *(Retention) The executive retains an appointee (i.e., $\rho^*(\cdot, b_P) > 0$) only if $b_P \in \Re$ and $\hat{\kappa} \geq \overline{\kappa}$ where*

$$\overline{\kappa} = \begin{cases} \dfrac{\kappa b_A^2}{b_A^2 - b_P^2} & \text{if } b_A \leq \epsilon(\theta_l), b_P \in \Delta^* \\[3mm] 1 - \dfrac{((1-\kappa)b_A^2 - b_P^2)}{(1-\theta_l)Var(\omega)} & \text{if } b_A \leq \epsilon(\theta_l), b_P \notin \Delta^* \\[3mm] \dfrac{b_A^2 - (1-\kappa)(1-\theta_l)Var(\omega)}{b_A^2 - b_P^2} & \text{if } b_A > \epsilon(\theta_l), b_P \in \Delta^* \\[3mm] \kappa + \dfrac{b_P^2}{(1-\theta_l)Var(\omega)} & \text{if } b_A > \epsilon(\theta_l), b_P \notin \Delta^*. \end{cases} \qquad (2.10)$$

Otherwise, the appointee is dismissed (i.e., $\rho^*(\cdot, b_P) = 0$).

An important implication of Lemma 2.4 is that as ideological disagreement between the executive and the appointee increases, appointees must demonstrate greater expertise in order to be retained. This is consistent with the intuition that competence may compensate for worse ideological alignment. An ally appointee need only be as expert as his potential replacement in order to be retained, whereas a non-ally must be more expert. The level of competence an appointee must demonstrate in order to be retained is depicted graphically in Figure 2.3.

Two observations are key for understanding appointment incentives in the first period: retaining decision-making authority improves a non-expert appointee's reputation (Remark 2); and the ideology of the appointee affects the credibility of removal. The ideology of the first period appointee commits the executive to using the retention threshold $\bar{\kappa}$ which affects a non-expert appointee's incentives to improve his reputation by retaining decision-making authority. This means that, if the bureaucrat is moderate, the level of expertise required to be retained directly corresponds to the discipline the executive can induce in equilibrium amongst appointees that prefer to delegate to the bureaucrat (i.e., $b_P \in \Delta^*$).

Delegation with Reputation Concerns

Now I consider an appointee's delegation behavior when he is subject to oversight and removal by the executive. This is key for understanding first period appointment incentives because the threat of removal may induce appointees to deviate from their second period policymaking behavior if the benefit of office-holding is sufficiently large. I restrict attention to this substantively important case.

Assumption 2.1 guarantees that an ally appointee prefers to be retained to such an extent that he is willing to sacrifice policy utility in the first period to do so. For sufficiently low office-holding motivations, there no meaningful tradeoff between appointee ideology and first period policymaking. If office-holding motives are sufficiently weak, appointees do not deviate from their second period delegation behavior in order to remain in government. This analysis seeks to highlight optimal appointments precisely when retention motives dominate first period policy concerns.

Assumption 2.1 $\tau > \max\left\{\dfrac{1}{\delta}\left[(1-\theta)Var(\omega)-(1-\delta\kappa)b_A^2\right], \kappa b_A^2(1+2\sqrt{1-\kappa})\right\} \equiv \bar{\tau}$

In order to characterize first period delegation, I first define what it means for an appointee to under-delegate. An appointee is said to under-delegate if he fails to rely on bureaucratic expertise due to retention concerns. Definition 2.4 provides a formal statement of under-delegation.

Definition 2.4 *(Under-Delegation) An appointee is said to under-delegate if* $\sigma_1^*(\theta_P, b_P) < \sigma_2^*(\theta_P, b_P)$.

$b_P \in \Delta^*$

.5

Figure 2.1: $b_A < \frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}}$

$b_P \in \Delta^*$

.5
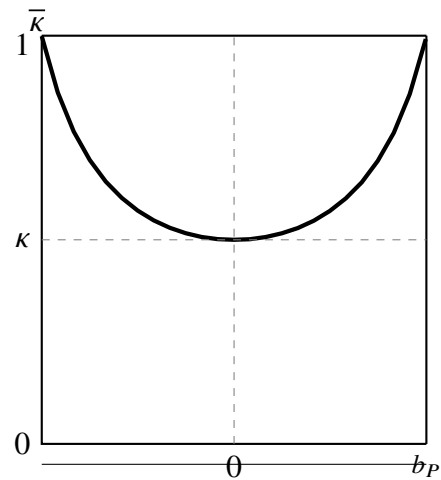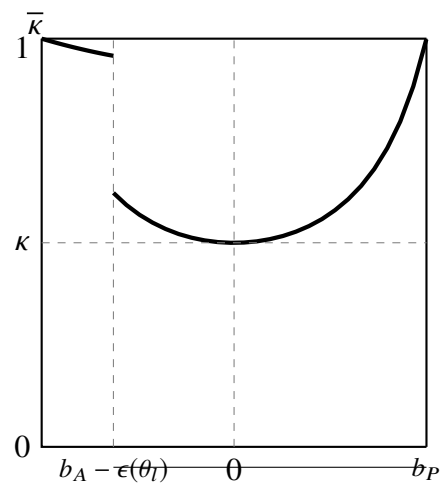
Figure 2.2: $\frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}} < b_A < \epsilon(\theta_l)$

Figure 2.3: Retention threshold, $\overline{\kappa}$, for $b_P \in \Re$.

Note: The graph is constructed for $\kappa = \frac{1}{2}$, $\theta_l = 0$. The left figure uses $b_A^* = 0.15$, the right uses $b_A = 0.2$.

Understanding an appointee's incentives to under-delegate is critical for understanding the executive's preferences over first period appointments when the bureaucrat is moderate. Non-expert appointees more aligned with the executive do not need to demonstrate as much expertise in order to be retained. This means non-experts can delegate less and still be retained. Lemma 2.5 formally characterizes equilibrium delegation in the first period.

Lemma 2.5 *(First Period Delegation) Assume $\tau > \bar{\tau}$ and $b_A < \epsilon(\theta)$. In any equilibrium that satisfies D1,*

- *expert appointees always select policy themselves $\sigma_1^*(1, b_P) = 0$*

- *non-expert appointees under-delegate if $b_P \in \Delta^* \cap \Re$ with*

$$\sigma_1^*(\theta_l, b_P) = \frac{b_P^2}{(1 - \kappa)b_A^2};$$ (2.11)

otherwise, non-expert appointees aligned with the bureaucrat delegate, while non-expert appointees unaligned with the bureaucrat retain authority, $\sigma_1^*(\theta_l, b_P) = \sigma_2^*(\theta_l, b_P)$.

By Lemma 2.5, non-expert ally appointees will determine policy themselves despite a preference for delegation absent retention concerns. This means that the executive's belief an ally appointee that retains decision-making authority is expert is κ. Similarly, Lemma 2.5 implies that the executive's belief an appointee unaligned with the bureaucrat (i.e., $b_P \notin \Delta^*$) that retains decision-making authority is expert is also κ, given appointees unaligned with the bureaucrat always determine policy themselves (i.e., $\sigma_1^*(\theta_P, b_P) = 0 \ \forall \ b_P \notin \Delta^*$).

For identical levels of expected competence, the executive will always prefer an ally to a non-ally–and so there always exists some $b_P \in \Delta^*$ that the executive prefers to $b_P \notin \Delta^*$ in the first period. In second period, Lemma 2.2 implies $b_P \in \Delta^*$ provided $b_A \leq \epsilon(\theta)$ following dismissal $r = 0$. Therefore, Proposition 2.1 follows as a direct implication of Lemma 2.2 and Lemma 2.5.

Proposition 2.1 *Assume $\tau > \bar{\tau}$ and $b_A < \epsilon(\theta_l)$. Then, $\beta_t^{P*} \in \Delta^*$.*

The executive will always select appointees that have a policy interest in delegating authority to the bureaucrat if the bureaucrat is moderate. Nevertheless, if office-holding is sufficiently valuable to political appointees (Assumption 2.1), appointees

$\sigma_t^*(\theta_l, b_P)$

$b_P \in \Delta^*$

.5

Figure 2.4: $b_A < \frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}}$

$\sigma_t^*(\theta_l, b_P)$

$b_P \in \Delta^*$

.5
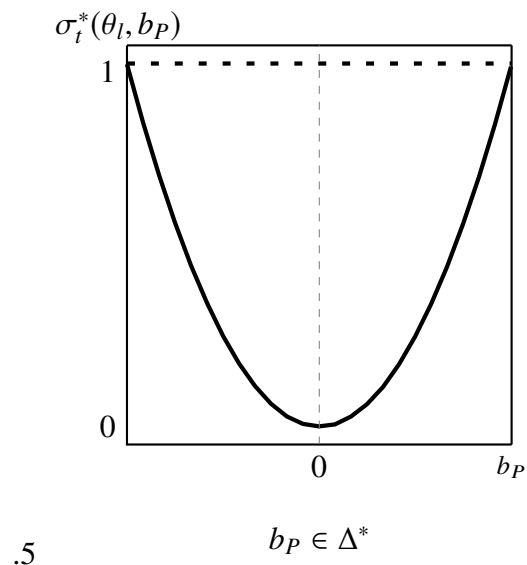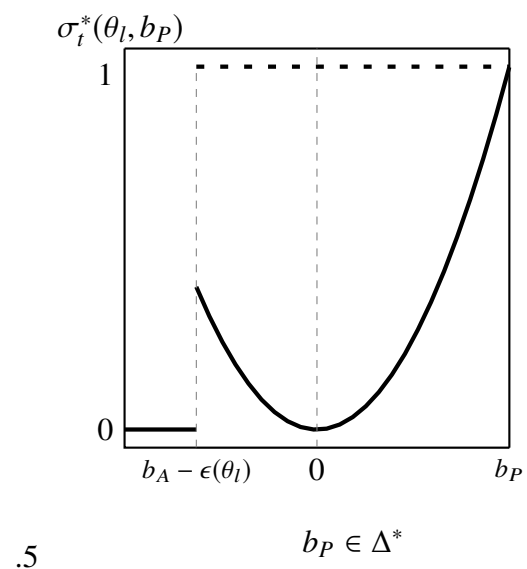
Figure 2.5: $\frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}} < b_A < \epsilon(\theta)$

Figure 2.6: Equilibrium delegation by non-experts if $b_P \in \mathfrak{R}$.

*

Note: The solid segments indicate equilibrium delegation by the non-expert appointee if $t = 1$. The loosely dashed segment indicates equilibrium delegation by the non-expert appointee if $t = 2$. The graph is constructed for $\kappa = \frac{1}{2}$, $\theta_l = 0$. The left graph uses $b_A = 0.15$, the right uses $b_A = 0.2$.

distort their use of bureaucratic expertise (Lemma 2.5). In particular, non-expert appointees sufficiently aligned with both the bureaucrat and the executive under-delegate in the first period.

2.4 Equilibrium and Dynamics of Appointments

In this analysis, I focus on the case of a moderate bureaucrat. This is precisely when there is a meaningful conflict between an ally appointee's personal career incentives and policy-optimal use of bureaucratic expertise from the executive's perspective. The executive always prefers that non-expert appointees delegate to a moderate bureaucrat, whereas non-expert appointees face incentives to improve their reputation by retaining policymaking authority.

To build intuition for the equilibrium results, first consider the executive's utility from an ally appointee. By Lemma 2.5, both expert and non-expert ally appointees will determine policy themselves if office-holding benefits are sufficiently large. Then, the executive's utility from appointing an ally in the first period is

$$-(1 - \kappa)(1 - \theta_l)\text{Var}(\omega) - \delta(1 - \kappa)b_A^2. \tag{2.12}$$

Now consider the executive's expected utility from a non-ally that favors delegation (i.e., $b_P \in \Delta^*$). Given an appointee's delegation behavior (Lemma 2.5), the executive's expected utility from appointing a non-ally $b_P \in \Delta^* \cap \mathfrak{R}$ may be written as

$$\underbrace{\frac{b_P^2}{b_A^2}\left[b_P^2 + (1 - \theta_l)\text{Var}(\omega)\right]}_{\text{Policy gains}} - \underbrace{2b_P^2}_{\text{Policy losses}} - \underbrace{(1 - \kappa)(1 - \theta_l)\text{Var}(\omega) - \delta(1 - \kappa)b_A^2}_{\text{Constant in appointee bias, } b_P} \tag{2.13}$$

Comparing the executive's utility from an ally (equation 2.12) to her utility from a non-ally (equation 2.13) highlights that first period appointments only influence the executive's expected utility through the appointment's affect on first period policy: if office-holding is sufficiently valuable, the executive's second period expected utility is identical for all $b_P \in \Delta^* \cap \mathfrak{R}$. Therefore, the executive will choose the ideology of her first period appointee in order to maximize first period control. As the policy losses from a non-ally are concave, whereas the gains are convex this implies either $b_P = 0$ if the policy losses exceed the policy gains or $b_P \in \{-b_A\sqrt{1 - \kappa}, b_A\sqrt{1 - \kappa}\} \cap \Delta^*$ (by Proposition 2.1).

The policy gains outweigh the policy losses only if the bureaucrat is sufficiently moderate. Proposition 2.2 states the key result of the analysis. If bureaucrats
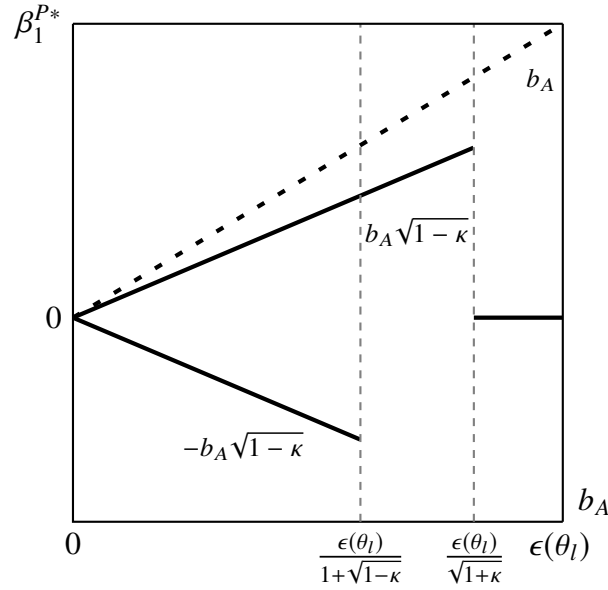
Figure 2.7: Appointee Selection if $\tau > \overline{\tau}$ ($t = 1$)

*

Note: The solid segments indicate the president's optimal first period appointee.
The loosely dashed segment indicates the bureaucrat's bias. The graph is
constructed for $\kappa = \frac{1}{2}$, $\theta_l = 0$.

are not too extreme, then the president benefits from installing appointees whose ideologies differ from her own. In equilibrium, the president selects the appointee to maximize first period discipline. This guarantees policy is made by experts in the first period: either by expert appointees who maintain decision-making authority or by the expert bureaucrats empowered to make policy by non-expert appointees. This highlights that worse ideological alignment between the executive and her appointee may confer greater control in the first period.

Proposition 2.2 *(First Period Appointments) Assume $\tau > \overline{\tau}$ and $b_A < \epsilon(\theta)$. If $b_A < \frac{\epsilon(\theta_l)}{\sqrt{1+\kappa}}$, then in any equilibrium that satisfies the D1 refinement, the president selects a biased first period appointee, $\beta_1^{P*} \neq 0$:*

- *If $b_A < \frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}}$, then $\beta_1^{P*} \in \{-b_A\sqrt{1-\kappa}, b_A\sqrt{1-\kappa}\}$.*

- *If $\frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}} < b_A < \frac{\epsilon(\theta_l)}{\sqrt{1+\kappa}}$, then $\beta_1^{P*} = b_A\sqrt{1-\kappa}$.*

Otherwise, if $b_A > \frac{\epsilon(\theta_l)}{\sqrt{1+\kappa}}$, the president selects an ally in the first period, $\beta_1^{P*} = 0$.

If the bureaucrat is sufficiently aligned with the president, the ideological divergence between the president and her appointees is increasing in bureaucratic bias. As bureaucratic bias increases, the president must select increasingly less aligned appointees in order to encourage non-expert appointees to rely on better informed bureaucrats. In contrast, as competence is more abundant, the president faces less of a tradeoff between ideology and expertise. This leads the president to select appointees more aligned with her own ideology—and less aligned with the agent. As appointee talent improves, the president is less willing to appoint non-allies given the increased likelihood ally appointees are competent. These results are summarized in Proposition 2.3.

Proposition 2.3 *(Ideological Alignment) Assume $\tau > \bar{\tau}$ and $b_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$. Then, ideological divergence between the executive and her first period appointee is*

- *increasing in the bureaucrat's bias, b_A*

- *decreasing in the expected competence of a replacement, κ.*

The analysis has implications for how political appointments evolve throughout the president's tenure in office. Provided the bureaucrat is sufficiently moderate, first period appointees are always less aligned with the president than second period appointees. This result is stated formally in Proposition 2.4. In the second period there is no tradeoff between appointee ideology and control over policymaking— each type of ally appointee takes the policy-optimal action given his type. In contrast, in the first period the president confronts a tradeoff between ideology and control. In order encourage reliance on bureaucratic expertise, she appoints a non-ally.

This result is consistent with empirical findings that suggest presidents prioritize loyalty more as their administrations progress (George A. Krause and O'Connell 2016).[11] This analysis suggests that as the nature of the appointments problem itself changes over time, appointee selection also changes. When removal is possible and the bureaucrat is sufficiently moderate, the president appoints non-allies. When removal is impossible, real loyalty vis-à-vis appointee behavior coincides with preference loyalty. If removal is more costly due to a weak or dwindling pool of

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[11]George A. Krause and O'Connell (2016) attribute this change in appointments to presidents learning on-the-job how to better manage the bureaucracy. This analysis suggests that selecting appointees on the basis on preference alignment may not be due to experiential learning (D. P. Carpenter 2010; George A. Krause and O'Connell 2016), but rather due to the changing nature of the appointments problem.

replacements, then political removals may be less credible in practice late in an administration.

Proposition 2.4 *(Evolution of Appointments) Assume $\tau > \overline{\tau}$ and $\beta_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$. Then, the first period appointee is less aligned than his replacement, or $|\beta_1^{P*}| > |\beta_2^{P*}|$.*

The analysis demonstrates that, conditional on retention, non-allies are more likely to be competent. Proposition 2.5 states that if the bureaucrat is moderate in equilibrium non-allies are retained only if they are experts, whereas both expert and non-expert allies may be retained. This is a direct implication of Lemma 2.5.

Proposition 2.5 *(Loyalty-Competence) Assume $\tau > \overline{\tau}$ and $b_A < \epsilon(\theta)$. If $b_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$, then a non-ally appointee retained in equilibrium is an expert (i.e., $\kappa^*(r = 1) = 1$). If $b_A > \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$, then an ally appointee retained in equilibrium is expert with probability κ (i.e., $\kappa^*(r = 1) = \kappa$).*

While appointee expertise is initially independent of ideology, this analysis suggests that an association between ideology and expertise amongst appointees that remain in the administration may develop as an administration progresses. The association between an appointee's level of expertise (competence) and an appointee's policy preferences (loyalty) arises due to how appointee's career concerns interact with the credibility of removal.

2.5   Conclusion

I argue that the relationship between optimal appointee ideology and agency ideology is more subtle than previous work has suggested precisely because of the ongoing accountability relationship between political appointees and the president. The president's ability to remove political appointees on the basis of on-the-job performance affects how political appointees negotiate interactions with career civil servants. If political appointees vary in their ability to effectively execute policy, delegation to expert career bureaucrats may signal an appointee lacks the ability to determine policy himself.

This means political appointees face reputation concerns that lead them to try to demonstrate expertise. These reputation concerns affect an appointee's willingness to rely on the expertise of subordinate career bureaucrats within their organizations. In order to demonstrate expertise, political appointees may seek to exert more control over policy by retaining decision-making authority.

As a result, the president faces a tradeoff between ideological alignment and informed policymaking. If the bureaucrat is sufficiently moderate and the benefit of retention is sufficiently large, the president only benefits from bureaucratic expertise if she appoints a less aligned political appointee. Loyal appointees will face career incentives to select policy themselves, even if they lack the expertise to do so effectively. In contrast, appointees less aligned with the president have more of an incentive to delegate to career experts because threats of dismissal are more credible.

The results suggest that selecting non-ally appointees is valuable because it facilitates reliance on bureaucratic expertise by non-expert appointees. This improves policymaking in the first period and leads to retention of more competent appointees. The results highlight the influence of dynamic incentives on optimal political appointments: in a dynamic model, intrinsic policy preferences do not necessarily coincide with appointee behavior.

Chapter 3

ELECTORAL ACCOUNTABILITY AND POLITICAL COMPETENCE

Conventional wisdom suggests—and much political economy research assumes—that voters prefer competent politicians that are better able to effectively execute policy. But what if a majority is aware that politicians will not use their political competence to pursue policies the majority prefers? For instance, politicians, once in office, may be responsive to special interest constituencies that prefer policies that impose a cost to the majority. In this case, effective implementation of the special interest agenda may only worsen majority welfare.

This paper formalizes the intuition that politicians have incentives to pursue the interests of passionate minorities (Downs 1957) and derives the implications for accountability when this incentive is commonly known by the electorate. As political competence improves a politician's ability to target policy reforms, the majority prefers less competent politicians that are less able to target policy benefits to narrow constituencies. In this setting, a crisis of political competence does not indicate voter irrationality or incompetence, rather it indicates that the majority recognizes its own limited control over the future actions of politicians. By electing incompetent politicians the majority reasserts some control over future policy by subverting a politician's ability to serve special interest constituencies.

The results are premised on two key substantive assumptions: (*i*) preference intensity matters for political outcomes (e.g., Downs 1957), and (*ii*) average voters know politicians have an incentive to pursue special interest policy reforms. This generates intuition as to how a majority of the electorate could correctly perceive that a particular candidate is less competent and yet prefer the incompetent candidate to a more competent alternative. That is, the majority both knowingly and deliberately elects a less competent politician.

I derive the social welfare implications of the majority's attempts to influence policy through its strategic retention behavior in an environment in which the special

interest policy agenda maximizes social welfare. The results suggest that the majority undermines social welfare maximizing reform by either inducing politicians to pursue the majority's interests—which worsens current policy—or by selecting less capable candidates to govern—which worsens future policy.

Even if social welfare considerations should prompt politicians to pursue special interest reforms, politicians may pursue the majority agenda in order to gain re-election. The extent to which the majority coalition's support affects a politician's reelection prospects depends on the relative size of the majority and special interest coalitions, as well as the extent of information asymmetries between majority and special interest voters. If the special interest constituency is small or the majority is well-informed, politicians will distort policy towards the interests of the majority as majority support is critical for reelection. Instead, if the special interest constituency is relatively large or the majority is ill-informed, politicians will pursue the special interest agenda.

The extent to which the majority coalition is able to induce politicians to pursue their interests in the first period affects the information available to both the majority and the special interest coalition prior to voting. If competent politicians sometimes pursue the majority's preferred policy to win reelection, first period policy outcomes will be uninformative of candidate ability, whereas if both types of politicians pursue the special interest agenda, policy outcomes will better reflect candidate skill. Additional information about candidate ability introduces competing effects: more information enables special interest voters to more effectively select competent candidates, but also enables majority voters to better select less competent ones.

To develop this argument, I construct a two-period accountability model that explicitly incorporates policy conflict between majority and special interest constituencies. The model represents the strategic dynamic between an incumbent politician and society as an electoral accountability arrangement, in which politicians are accountable to constituencies with opposing policy preferences. Politicians are motivated by social welfare and office-holding considerations, while voters seek to ensure accountability to their policy preferences through their voting decisions.

Each constituency attempts to exert control over the incumbent politician's policy decisions, but the constituencies differ in their ability to reliably monitor an incumbent's policy performance. In particular, the majority only observes a noisy signal of the actual policy outcome, whereas the special interest constituency always perfectly observes policy outcomes. This information asymmetry between majority and

special interest voters suggests that special interest support is valuable to politicians for two reasons: (*i*) it is more predictable, and (*ii*) it reduces the need to gain the support of unpredictable majority voters to win reelection.

Previous work argues that as majority support is necessary to guarantee reelection, politicians often face electoral incentives to pander—pursuing popular policies at the expense of furthering social welfare (Canes-Wrone, Herron, and Kenneth W Shotts 2001; Fox and Kenneth W Shotts 2009; Maskin and Tirole 2004; Harrington Jr 1993). These arguments would appear to suggest that aggregate welfare distortions may be avoided if politicians exercise true policy leadership by adopting unpopular policies which further the public good and provide more information about a politician's competence.

However, this view fails to consider that the majority's preferences over political expertise may not align with socially optimal candidate selection. In particular, majority voters who are aware of their own limited control over politicians may prefer to elect politicians who are incompetent and, therefore, less capable of exercising effective leadership. Exercising policy leadership in the first period may only worsen candidate selection by providing more information about candidate ability to majority voters who have an interest in electing only incompetent representatives.

The analysis highlights that majority coalitions potentially undermine the policy goals of specialized or narrow coalitions either by inducing politicians to pursue the majority's interests in the first period or by increasing the likelihood the second period representative is incompetent. The results in this paper indicate that electoral incentives alone are not necessarily sufficient to guarantee that politicians pursue the majority's preferred policy agenda in the first period—especially if the electoral gains to pursuing the majority's preferences are dulled by the majority's own poor information. However, even if the majority fails to influence first period policy, it may still influence the disposition of second period policy by determining the types of politicians who assume office in the future.

This induces a familiar tension between accountability and selection (Fearon 1999). From the majority's perspective, accountability to its interests improves first period policy at the expense of selection: competent politicians that are better able to pursue the special interest agenda in the second period are more likely to be retained if they sometimes pursue the majority policy in the first period. However, from a social welfare perspective, accountability to the majority's policy interests in the first period worsens first period policy, but impedes the majority's ability to select

less competent politicians which improves second period policy.

If the minority is sufficiently large, the majority's threats of dismissal following an unfavorable signal of policy performance fail to generate accountability to the majority's policy preferences. Politicians exercise policy leadership and pursue the special interest agenda in each period and the majority only reelects the incumbent following a favorable policy signal. In this case, first period policy always improves. However, policy leadership may either improve or worsen socially optimal electoral selection. Less competent politicians are retained more often if the minority is moderately-sized, whereas policy leadership improves the minority's ability to select competent types when the minority is relatively large. I refer to this as a special interest discipline equilibrium.

In contrast, if the special interest coalition is relatively small, reelection-motivated politicians may have an incentive to distort policy decisions towards the interests of the majority. In order to gain reelection, competent incumbents face incentives to appear inexpert in order to appeal to the majority. To avoid revealing their competence to majority voters, competent incumbents will sometimes implement policies that promote the majority's interests. This worsens first period welfare, but improves second period welfare as competent politicians are retained more often. I refer to this as a limited majority discipline equilibrium.

This paper is structured as follows. First, I review related literature. Then, I present a formal model of policymaking that incorporates competition between a majority and special interest constituency. This provides a rational, strategic basis for the majority's preference for incompetence. Then, I analyze the incumbent's policy actions and voters' strategic retention decisions. Following this, I discuss the equilibrium results generated by the model. The results demonstrate that if the policy demands of the special interest group are sufficiently strong, the majority is able to exert direct control over first period policy only if it is relatively large or informed, but may exercise indirect control over future policy through the selection of worse candidates. I conclude with a discussion of the welfare implications.

3.1   Related Literature

While average voters commonly express concerns about the role of special interests in politics, most formal analyses ignore this tension when considering voters' preferences over politicians.[1] Previous work generally assumes voters prefer competent

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[1] Notable exceptions include Snyder and Ting (2008), Lohmann (1998).

politicians, with few exceptions (e.g., Di Tella and Rotemberg 2016; Egorov and Sonin 2011; Buisseret and Prato 2016; Schnakenberg 2018; Kartik and Van Weelden 2019).[2] This literature suggests that political competence confers either direct benefits (e.g., policy expertise) or indirect benefits (e.g., greater electoral control) to voters.[3] Voters either implicitly or explicitly prefer competent politicians as political competence is not at the expense of either electoral control or policy discipline. In fact, policy expertise often improves the voter's ability to exert control over the politician's policy actions.

Nevertheless, voters often view organized special interest groups as exerting disproportionate influence over the actions of politicians (Gilens and Page 2014). A robust formal literature argues that organized groups translate either resource or informational advantages (Austen-Smith and Wright 1994) into policy gains. For instance, Lohmann (1998) demonstrates that policy will be biased towards smaller groups, as smaller groups typically have greater monitoring capabilities. Similarly, Grossman and Helpman (1996) demonstrate that interest groups are able to bias policies toward the group's ideal, either through contracting behavior or increased monitoring efforts. A common feature of these models is that the resulting policy bias is at the expense of majority welfare, but not necessarily at the expense of social welfare. This is because both special interest and majority coalitions have a common interest in selecting competent candidates—and special interest monitoring improves candidate selection.

In contrast, I develop a model that delivers the opposite prediction: the welfare distortions are at the expense of both special interest welfare and social welfare. This is because voting coalitions in my model do not have a common interest in selecting competent candidates—candidate competence only benefits the coalition whose policies the candidate seeks to enact. As a result, even limited majority monitoring worsens either first period policy or second period policy through the

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[2]On the surface, the preference for incompetence explored in this paper may seem similar to the loyalty-competence tradeoff developed in Egorov and Sonin (2011), but, in fact, it is fundamentally different. Neither type of politician is loyal in this model. In contrast, Schnakenberg (2018) argues that electing competent politicians hinders a voter's ability to enforce strong incentive contracts in an incumbent's first term, which leads voters to possibly prefer incompetent representatives. The preference for incompetence is driven by dynamic trade-offs, whereas the majority's preference for incompetence in my model is driven by common agency concerns.

[3]Related literature includes Fearon (1999), Ferejohn (1986), Austen-Smith and Banks (1989), Snyder and Ting (2008), Ashworth and Bueno de Mesquita (2008), Banks and R. Sundaram (1993), Banks and R. K. Sundaram (1998), Harrington Jr (1993), Canes-Wrone, Herron, and Kenneth W Shotts (2001), and Besley (2006). Additionally, Ashworth (2012) provides an overview of recent theoretical and empirical findings.

majority's impact on candidate selection.

The theoretical analysis in Buisseret and Prato (2016) is most similar to the analysis presented here in terms of highlighting the tradeoffs voters face between a politician's competence and their own ability to control the politician's actions once in office. The model similarly examines a voter's ability to exert electoral control over legislators of varying quality. However, in Buisseret and Prato (2016), the voter's poor control over politicians is due to a multitask problem where politicians may devote effort to activities that do not benefit the voter, whereas I examine how competition between voting coalitions impacts majority control and electoral selection.

Focusing on voting coalitions importantly constrains the contracting technology I am able to consider: each voting group is only able to exercise control through its retention decisions. If majority support is necessary to gain reelection, it may seem that the majority would easily be able to induce politicians politicians to pursue their interests. Yet politicians may have incentives to pursue special interest policies that further social welfare at the expense of majority welfare. In this model, preference divergence in the electorate delivers the seemingly pathological result of a rational preference for incompetence, while the relative size of the coalitions and the extent of information asymmetries determine the extent of welfare distortions.

More recent work considers the availability of competent candidates during times of economic turmoil (Izzo 2018). Izzo (2018) demonstrates that economic crises potentially deter competent candidates from entering electoral contests. This may suggest that voters are constrained by the availability, or lack thereof, of competent candidates. Yet the election of incompetent representatives may not be a consequence of scarce political talent. Even if competent politicians are available, majority voters will seek to elect incompetent politicians.

This model contributes to a growing body of literature examining perverse political outcomes and incentives introduced by electoral institutions when voters have limited information (Canes-Wrone, Herron, and Kenneth W Shotts 2001; Ashworth and De Mesquita 2014; Ashworth, Bueno de Mesquita, and Friedenberg 2017; S. Gailmard and Patty 2019). In particular, the results provide further demonstration that improving voter information does not necessarily improve governance outcomes. In this model, this is a consequence of voting coalitions holding different preferences over political expertise, whereas in previous work voter monitoring encourages politicians to take actions that obscure their type in order to win reelection

(Ashworth and De Mesquita 2014).

More broadly, this paper demonstrates that in common agency environments with moral hazard, the party that is weaker at the contracting stage places even more importance on the selection of agents. In a competitive electoral environment, government policy may not simultaneously provide benefits to both a special interest minority and the general electorate. Both coalitions would prefer to dictate the politician's action, yet the coalitions differ in their ability to influence the representative's policy choice. If a coalition is unable to influence a representative's behavior in office, the group will attempt to influence policy outcomes through the selection of candidates.

3.2 The Model

Consider a two-period model of policymaking with periods denoted $t = 1, 2$ in which a unitary incumbent executive (I) implements a policy that generates welfare for a society. The society is represented by a large, but finite set of voters, N, indexed $i = 1, \ldots, N$ with N odd. There are two distinct, homogenous voting groups in the society: a majority group and a special interest group. The majority group consists of $(N + 1)/2 \leq M < N$ individuals, where $h = 1, \ldots, M$ indexes majority voters. The minority group consists of the remaining $N_s \equiv N - M$ voters, where $j = M + 1, \ldots, N$ indexes special interest voters. This captures that the special interest coalition represents a relatively narrow constituency in the society, whereas the majority represents a broader constituency. I define $m \equiv M/N$ and $n \equiv (N - M)/N$ as the population shares of the majority and special interest coalition respectively.

In each policymaking period, Nature draws a state of the world, $\omega_t \in \{0, 1\}$, which is distributed identically and independently across periods. The common prior belief is that $\Pr(\omega_t = 1) = \pi \in (\frac{1}{2}, 1)$. The incumbent politician observes a private signal of the state of the world, $w_t \in \{0, 1\}$, before implementing a policy, $x_t \in \{0, 1\}$. The voters do not observe the incumbent's policy action directly. Instead, each voter obtains a payoff from the policy outcome, which reflects both the policy implemented and the prevailing macroeconomic conditions. Following the first policymaking period, a majority rule election with no abstention occurs in which the society votes to either reelect or replace the incumbent with an ex ante identical challenger. I define the level of support necessary for reelection as $N^* \equiv (N + 1)/2$.

A politician's type represents her level of competence, $\theta \in \{\lambda, 1\}$. A politician's

competence is her private information and reflects the quality of her policy information, w_t. A competent politician ($\theta = 1$) always observes a perfectly informative signal of the state of the world, whereas an incompetent politician ($\theta = \lambda$) observes an imperfectly informative signal with $\Pr(w_t = \omega_t | \theta = \lambda) = \lambda$ and $\Pr(w_t = 1 - \omega_t | \theta = \lambda) = 1 - \lambda$. I assume $\lambda \in (\pi, 1)$.[4]

In each period, the aggregate policy outcome, Π_t, is determined by the policy implemented and the state of the world according to

$$\Pi_t = \begin{cases} 1 & \text{if } x_t = \omega_t \\ 0 & \text{otherwise.} \end{cases}$$

This reflects that the returns to a policy intervention vary depending on the underlying economic conditions.

Voters obtain information about an incumbent's policy performance by observing a signal of the policy outcome in the first period. Each voter's payoff from the government intervention is determined by the aggregate policy outcome generated, Π_t. The policy outcome indicates the extent to which the policy action benefits the majority or the special interest constituency. If $\Pi_t = 1$, the political outcome favors the majority, whereas if $\Pi_t = 0$, the policy outcome favors the special interest group.

The special interest constituency always observes the policy outcome, Π_t, directly prior to the election. This is identical to the case in which the minority observes both the policy choice, x_t, and the state of the world, ω_t, prior to the election. In contrast, each majority voter observes a noisy signal, s_t, of the actual policy outcome:

$$s_t^h = \begin{cases} \Pi_t & \text{with probability } \alpha \\ 1 & \text{with probability } \frac{1}{2}(1 - \alpha) \\ 0 & \text{with probability } \frac{1}{2}(1 - \alpha). \end{cases}$$

The parameter α represents the majority's effective monitoring capacity. As α increases, the likelihood the majority is informed of the true policy outcome increases. As α decreases, the majority voters are less likely to observe the true policy outcome. I assume $\alpha \in (0, 1)$.

The information asymmetry between majority voters and minority voters captures that majority voters are generally less aware of policy actions than voters with

[4]This guarantees that incompetent politicians possess policy-relevant private information for any signal realization, or $\Pr(\omega_t = 0 | w_t = 0) > \Pr(\omega_t = 1 | w_t = 0)$.

special interests. As special interest voters have more to gain from policy, they have a greater incentive to become informed (Olson 1965).

Sequence. The sequence of the game is as follows:

1. Nature draws the competence of the incumbent and challenger and each politician is privately informed of their own ability, θ.

2. Nature determines the state of the world, ω_1.

3. Incumbent observes a private signal of the state of the world, w_1, and then selects a policy, x_1.

4. The special interest constituency observes Π_1, whereas each majority voter observes the actual outcome $s_1^h = \Pi_1$ with probability α and an arbitrarily favorable or unfavorable signal $s_1^h \in \{0, 1\}$ with equal probability $\frac{1}{2}(1 - \alpha)$.

5. Voters simultaneously vote to reelect ($v^i = 1$) the incumbent or elect ($v^i = 0$) the challenger.

6. Nature determines the state of the world, ω_2.

7. The second period incumbent observes a private signal of the state of the world, w_2, and then selects a policy, x_2.

8. Payoffs are realized.

The common prior belief that an untried politician is competent is given by $\kappa \in (0, 1)$. This assumption implies that ex ante the challenger is as likely to be competent as the first period incumbent.

Payoffs and Information. A majority voter's utility is given by

$$U_t^h = \Pi_t.$$

This captures that a majority voter always prefers that the policy correspond to the state of the world, ω_t.

A special interest voter's utility is given by

$$U_t^j = \rho(1 - \Pi_t),$$

where $\rho > 1$ represents the preference intensity of special interest voters. The special interest constituency's policy preferences conflict with those of the majority group: the minority group prefers the opposite policy to the state, whereas the majority prefers that the policy coincide with the state. This captures that the self-interest of the minority coalition runs counter to the welfare of the majority constituency.

Each politician obtains utility from policy and office holding. In particular, her utility is a function of average voter welfare and the rents that accrue from office holding. An incumbent politician I obtains utility in period t given by

$$U_t^I = \frac{1}{N} \sum_{i=1}^{N} U_t^i + \tau\{I \text{ in office}\},$$

where $\tau \in (0, 1]$. As τ increases, the politicians become more concerned with maintaining office and less concerned social welfare. Each actor's total payoff from the interaction is the sum of their payoffs across each period.

Strategies and Beliefs. A strategy for each voter specifies a probability of retention $v_i \in [0, 1]$ for each possible information set—each first period policy outcome signal: $s_1^h \in \{0, 1\}$ for majority voters, or Π_1 for special interest voters. A majority voter's beliefs about the likelihood the first period incumbent is competent are given by $\hat{\kappa}^h(s_1^h)$, whereas a special interest voter's beliefs are given by $\hat{\kappa}^j(\Pi_1)$.

A strategy for each politician is a policy choice, x_t, as a function of her competence, θ and policy information, w_t, for each period in which the politician is eligible to be in office. Let $\sigma_t(w_t; \theta) \in [0, 1]$ represent the probability that an incumbent of type θ selects $x_t = 1$ given her private information w_t.

Assumption 3.1 *(Strong Special Interest Group)* $\rho > m/n$.

Assumption 3.1 guarantees that the special interest policy agenda maximizes social welfare such that absent reelection concerns politicians prefer to implement the special interest agenda. This assumption implies that the special interest group holds sufficiently strong policy preferences or equivalently that the special interest coalition is not too small (i.e., $N_s > N/(1 + \rho)$). This captures that often the consequences of policy interventions for the special interest coalition are more pronounced. Appendix C.2 provides results if instead the special interest group is weak. In this case, reelection concerns and policy motivations are aligned provided

the majority is sufficiently large. Politicians are motivated to pursue policies which produce the best outcomes for the majority.[5]

3.3 Analysis

The equilibrium analysis considers quasi-symmetric perfect Bayesian equilibria (PBE), in which voters' strategies are identical within each coalition. This implies each actor's actions are consistent with his or her beliefs and beliefs are derived using Bayes' Rule when possible. I consider only pure strategy PBE when pure strategy equilibria exist. If multiple equilibria exist, I restrict attention to the equilibrium that maximizes aggregate voter welfare.

As is standard in voting models, I restrict attention to weakly undominated voting strategies. This eliminates pathological voting behavior that arises due to concerns of pivotality. For instance, this restriction eliminates equilibria in which a special interest voter votes for the less competent candidate based on a belief that the less competent candidate has enough voter support to gain election or reelection. Similarly, this restriction eliminates equilibria in which a majority voter votes for the more competent candidate by the same rationale. Appendix C.1 provides formal proofs for the results.

Politicians

In the second period, the incumbent will pursue the policy that maximizes her payoff, given her private information, w_t. Remark 3 gives the incumbent's posterior beliefs in each period based on her private information.

Remark 3 (Incumbent Beliefs) An incumbent's posterior beliefs are given by

$$\hat{\pi}_t(w_t = 0; \theta) = \frac{(1-\theta)\pi}{(1-\theta)\pi + \theta(1-\pi)} < \frac{1}{2} < \hat{\pi}_t(w_t = 1; \theta) = \frac{\theta\pi}{\theta\pi + (1-\theta)(1-\pi)} \quad (3.1)$$

Absent reelection concerns, assumption 3.1 implies that the incumbent pursues the special interest agenda. Therefore, given Remark 3, the optimal policy choice for the second period incumbent is

$$\sigma_2(w_2; \theta) = 1 - w_2. \quad (3.2)$$

Lemma 3.1 *(Second Period Policy) In any perfect Bayesian equilibrium, the second period incumbent selects policy according to $\sigma_2^*(w_2; \theta) = 1 - w_2$.*

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[5]This is because I assume the majority observes a noisy signal of the actual policy outcome. If voters were restricted to drawing inferences of incumbent quality on the basis of policy choice, the executive could face incentives to pander.

Lemma 3.1 implies the following expected second period utility from office holding for each type of politician,

$$\mathbb{E}U_2^I(\theta) = \begin{cases} \rho n + \tau & \text{if } \theta = 1 \\ \lambda \rho n + (1 - \lambda)m + \tau & \text{otherwise.} \end{cases} \tag{3.3}$$

Voters

Majority Voting Rules. Given the second period incumbent pursues the minority agenda according to Lemma 3.1, a majority voter's expected utility given the competence of the second period incumbent is equal to

$$\mathbb{E}U_2^h = (1 - \hat{\kappa}^h)(1 - \lambda) \tag{3.4}$$

where $\hat{\kappa}^h$ represents a majority voter's belief that the second period incumbent is competent: either the posterior belief that $\theta = 1$ given s_1^h if the first period incumbent is reelected or κ if the challenger is elected. A majority voter's expected utility is decreasing in the expected competence of the second period incumbent, or as $\hat{\kappa}^h \to 1$. Therefore, a majority voter will reelect an incumbent if and only if the incumbent is less likely to be competent. This gives the following retention rule for a majority voter h,

$$v^h = \begin{cases} 1 & \text{if } \hat{\kappa}^h < \kappa \\ v^h \in [0, 1] & \text{if } \hat{\kappa}^h = \kappa \\ 0 & \text{otherwise.} \end{cases} \tag{3.5}$$

Special Interest Voting Rules. Given second period policy will reflect the preferences of the special interest coalition, the special interest group would prefer that policy be executed as competently as possible. A special interest voter's expected utility given the expected competence of the second period incumbent is equal to

$$\mathbb{E}U_2^j = (\hat{\kappa}^j + (1 - \hat{\kappa}^j)\lambda)\rho. \tag{3.6}$$

This is increasing in the expected competence of the second period representative. Therefore, a special interest voter will reelect an incumbent if and only if the incumbent is more likely to be competent. This gives the following retention rule for a special interest voter j,

$$v^j = \begin{cases} 1 & \text{if } \hat{\kappa}^j > \kappa \\ v^j \in [0, 1] & \text{if } \hat{\kappa}^j = \kappa \\ 0 & \text{otherwise.} \end{cases} \tag{3.7}$$

Lemma 3.2 summarizes each constituency's optimal voting rule and states that the special interest coalition has an incentive to elect competent politicians, whereas the majority coalition has an incentive to elect incompetent politicians. As the special interest voters observe the true policy outcomes generated by the politician, the coalition is better able to differentiate between competent and incompetent politicians. This reflects the superior monitoring capabilities of narrow or specialized coalitions (Olson 1965).

Lemma 3.2 *(Voting) A special interest voter reelects the incumbent only if the incumbent is more competent than a replacement:* $v_j^* > 0$ *only if* $\hat{\kappa}_j^* \geq \kappa$. *A majority voter reelects the incumbent only if the incumbent is less competent than a replacement:* $v_h^* > 0$ *only if* $\hat{\kappa}_h^* \leq \kappa$.

Reelection Probability

Using the voting strategies for each coalition to compute the incumbent's expected reelection probability reveals an important tradeoff. If in equilibrium incumbents exercise policy leadership and pursue the special interest agenda, the special interest coalition will reelect the incumbent provided the policy outcome favors the group, $\Pi_1 = 0$. If $\Pi_1 = 0$, then the incumbent captures the support of the entire special interest coalition. This means the incumbent requires less majority support to gain reelection when the outcome favors the special interest group.

If instead the incumbent pursues the majority policy agenda, the incumbent must gain the support of a majority of the electorate—but this support is exclusively derived from the majority coalition. In other words, action on the special interest agenda generates reliable support from the special interest coalition, whereas action on the majority agenda does not necessarily translate into electoral gains. If the majority's information is sufficiently bad or arbitrary, the increase in support from the majority does not outweigh the loss of sure support from the special interest constituency.

The incumbent's support from the majority coalition under each outcome is the sum of individual voting decisions, which are independent, identically distributed random variables for $\alpha \in [0, 1)$. Then, the difference in the incumbent's reelection probability if she pursues the majority agenda rather than the special interest agenda is

$$\Delta(v_h^*(1), v_h^*(0)) \equiv F_0(N^* - N_s; M, p_0) - F_1(N^*; M, p_1)$$
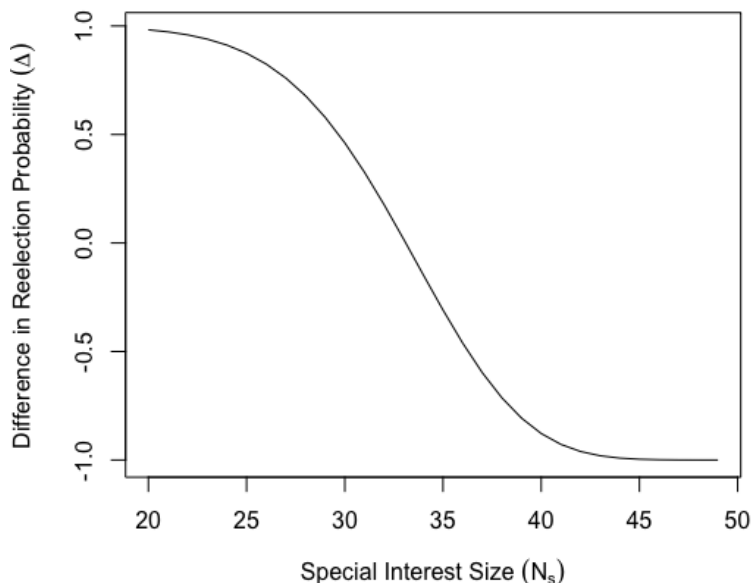
Figure 3.1: Difference in Reelection Probability if $v_h^*(1) = v_j^*(0) = 1$, $v_h^*(0) = v_j^*(1) = 0$

Note: The figure is constructed assuming $\rho = 4, \alpha = 0.5, N = 99$.

where F_Π represents the CDF of the binomial distribution characterized by (M, p_Π) and

$$p_0 = \frac{1}{2}(1 - \alpha)v_h^*(1) + \frac{1}{2}(1 + \alpha)v_h^*(0) \quad p_1 = \frac{1}{2}(1 + \alpha)v_h^*(1) + \frac{1}{2}(1 - \alpha)v_h^*(0).$$

Figure 3.1 graphs the electoral gain to pursuing the majority agenda. As the size of the special interest coalition increases, the incumbent is more likely to be reelected if she pursues the minority agenda. This is easy to see if we consider a minority of size $M - 1$. In this case, the pursuing the special interest policy means the incumbent only needs the support of one majority voter to win. This is very likely to happen even if the majority is relatively well-informed. In contrast, when the majority is large, the incumbent needs the support of more majority voters in order to be reelected.

3.4 Results

There are two types of equilibria, characterized by the first period policy discipline generated by the majority coalition. In special interest discipline equilibria, the majority is incapable of generating policy discipline directly and each type of incumbent politician prefers to pursue the special interest policy agenda in each period. In contrast, in limited majority discipline equilibria, the majority is able to induce competent incumbents to pursue the general interest policy agenda with positive probability in the first period. The extent to which the majority is able to induce accountability amongst incumbent politicians is determined by (*i*) the incumbent's reelection motivations and (*ii*) the size of the special interest coalition.

Special Interest Discipline. In special interest discipline equilibria, the majority is unable to induce competent incumbents to pursue their policy interests in the first period as policy concerns dominate reelection motivations. If the majority is ill informed, the threat of dismissal is insufficient to limit competent incumbents pursuit of the special interest policy agenda. In this case, competent incumbents prefer to pursue the special interest policy in each period. Definition 3.1 defines such special interest discipline equilibria.

Definition 3.1 *A special interest discipline equilibrium is a perfect Bayesian equilibrium, in which both competent and incompetent incumbents pursue the special interest agenda in each period according to* $\sigma_t^*(w_t; \theta) = 1 - w_t$.

If both competent and incompetent incumbents pursue the special interest policy in the first period, the majority is better able to differentiate between competent and incompetent incumbents on the basis of their private information, s_1. The substantive results persist if voters observe the policy choice in addition to (possibly) noisy utility. Appendix C.3 proves the existence of special interest equilibria if voters are also aware of the policy choice. Definition 3.1 implies voters hold beliefs characterized in Lemma 3.3.

Lemma 3.3 *(Special Interest Discipline: Voter Beliefs) In a special interest discipline equilibrium, a voter's beliefs are given by*

$$0 = \hat{\kappa}_j^*(1) < \hat{\kappa}_h^*(1) < \kappa < \hat{\kappa}_h^*(0) < \hat{\kappa}_j^*(0) < 1. \tag{3.8}$$

Proposition 3.1 *There exists a special interest discipline equilibrium, in which* $\sigma_t^*(w_t; \theta) = 1 - w_t$, $v_h^*(1) = v_j^*(0) = 1$ *and* $v_h^*(0) = v_j^*(1) = 0$ *if*

$$\Delta(1,0) \leq \frac{\rho n - m}{\tau + (1 - \kappa)(1 - \lambda)(\rho n - m)} \equiv \beta \tag{3.9}$$

which holds if and only if

$$N_s \geq N^* - F_0^{-1}\left(\beta + F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha)\right) \equiv \overline{N}_s. \tag{3.10}$$

If $N_s > \overline{N}_s$, *this is the unique quasi-symmetric perfect Bayesian equilibrium refined to rule out weakly dominated strategies.*

Limited Majority Discipline. In majority discipline equilibria, the majority is able to induce some accountability amongst incumbent politicians. A competent incumbent is only willing to subvert social welfare if doing so increases the likelihood of reelection. In this case, the future benefits of officeholding outweigh the potential policy losses in the first period. Definition 3.2 provides a formal characterization of limited majority discipline equilibria.

Definition 3.2 *A limited majority discipline equilibrium is a perfect Bayesian equilibrium, in which incompetent incumbents select first period policy according to* $\sigma_1^*(w_1; \lambda) = 1 - w_1$ *and competent incumbents select* $\sigma_1^*(0; 1) = \lambda$, $\sigma_1^*(1; 1) = 1 - \lambda$.

Lemma 3.4 *(Majority Discipline: Voter Beliefs) In a majority discipline equilibrium, a voter's beliefs are given by*

$$0 < \kappa_j^*(0) = \kappa_h^*(0) = \kappa = \kappa_h^*(1) = \kappa_j^*(1) < 1. \tag{3.11}$$

Proposition 3.2 *There exists a majority discipline equilibrium, in which* $v_h^*(0) = v_j^*(1) = 0$, $v_j^*(0) = 1$, *and* $v_h^*(1) \in (0, 1]$ *such that*

$$\Delta(v_h^*(1), 0) = \frac{\rho n - m}{\tau + (1 - \kappa)(1 - \lambda)(\rho n - m)} \equiv \beta \tag{3.12}$$

only if $N_s \leq \overline{N}_s$.

Proposition 3.2 states that competent politicians will use their private information to sometimes pursue the majority interest if and only if the majority are sufficiently likely to be informed.If the majority are sufficiently informed, conditioning retention decisions on the observed policy outcome induces competent politicians to pursue the majority's preferred policy with positive probability in the first period in order to

increase the probability of reelection, thereby improving voter welfare in the second period. The majority is only able to generate limited discipline amongst competent politicians as it is not credible for the majority to retain politicians more likely to be competent due to politicians' second period incentives to pursue special interest policies.

The analysis could be extended to incorporate pandering incentives for the politicians if the majority possibly only observes the politician's policy choice and believes one policy is ex ante more likely to be correct (i.e., $x_1 = 1$ is more likely to be correct if $\pi > \frac{1}{2}$). However, the focus of this analysis is to highlight circumstances under which politicians have an incentive to pursue the special interest policy agenda and to what extent these policymaking incentives induce perverse selection incentives amongst majority voters. This strategic incentive is distinct from the issue of pandering.

If the majority is sufficiently informed and politicians are sufficiently office-motivated, then the majority is able to exercise more control over policy selection. This control over first period policy is at the expense of the majority's second period welfare as reelection motivations prevent competent politicians from revealing their competence to voters. This improves electoral selection as competent politicians are retained more often. That is, the more control the majority exerts in the first period, the less future policy reflects the majority will. Figure 3.4 depicts the equilibrium regions graphically.

3.5 Welfare Implications

I consider the welfare implications of the equilibria discussed in the previous section. There are two mechanisms by which welfare distortions may arise in this model: (1) inefficient first period policy choice, and (2) inefficient candidate selection. As politicians select second period policy to maximize social welfare—pursuing the special interest policy agenda—the only mechanism by which the majority may influence the disposition of second period policy is through candidate selection.

As is standard in electoral agency models, there is a tension between informative first period policy outcomes and better or worse electoral selection. If incumbent politicians select first period policy to maximize social welfare, policy outcomes will reveal more information to voters about the incumbent's ability. Often this information improves selection as the policy interests of the representative voter—or the majority coalition—are typically assumed to align with the second period policy interests of politicians, such that the voter prefers to elect only competent
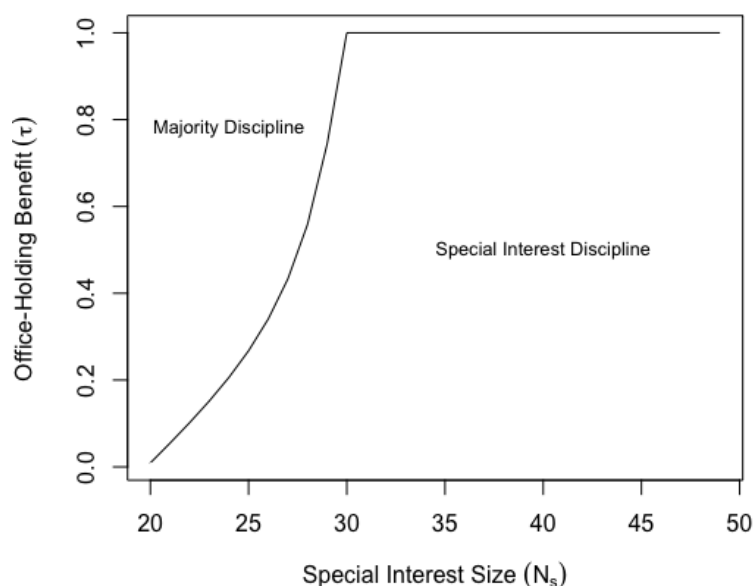
Figure 3.2: Equilibrium ($t = 1$)

Note: The figure is constructed assuming $\rho = 4, \alpha = 0.5, N = 99, \kappa = 0.5, \lambda = 0.75$.

candidates. In contrast, I obtain this result only if the minority wields sufficient electoral influence as increasing the amount of information available to voters about candidate types enables the majority to impede positive selection when the special interest coalition is not too large.

First Period Policy

In the equilibria identified in the previous section, the majority exerts limited control over first period policy only if the special interest group is sufficiently small (i.e., $N_s \leq \overline{N}_s$). The relative size of each coalition affects the level of majority support an incumbent politician must generate to win reelection. When the special interest group is sufficiently small, the reelection benefits of majority support outweigh the policy cost of pursuing the majority's interests.

More generally, the majority influences the incumbent's first period policy choice by rewarding politicians with retention following signals of favorable performance and threatening dismissal following signals of poor performance. This tool is most potent when the majority is aware of the actual policy outcome. As the reliability of the
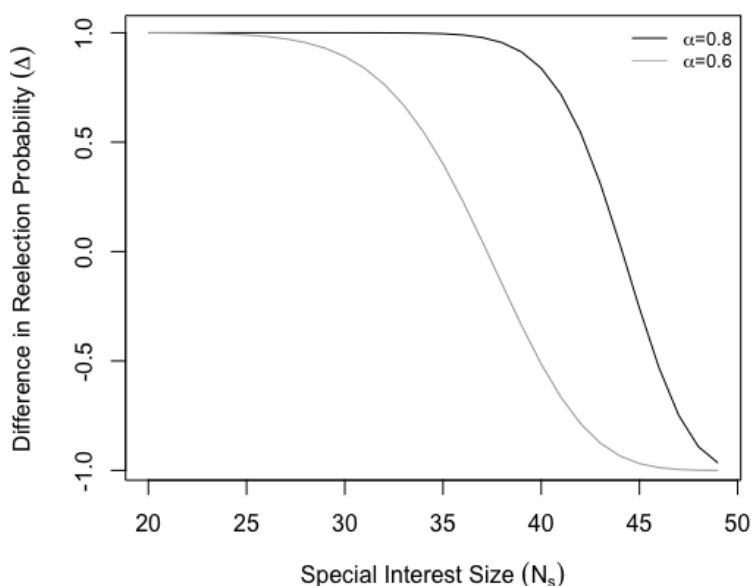
Figure 3.3: Difference in Reelection Probability by α (Special Interest Discipline Equilibrium)

Note: The figure is constructed assuming $\rho = 4, N = 99$.

majority's information increases (i.e., $\alpha \to 1$), the majority's rewards and sanctions are less arbitrary. As a consequence, a politician's actions impact her reelection prospects to a greater extent—the electoral rewards to pursuing the majority policy are not dampened by arbitrarily bad signals of performance, just as the electoral costs of pursuing the special interest policy are not mitigated by arbitrarily good signals.

Similarly, as the value of officeholding increases, the benefit of future office-holding outweighs the first period cost of policy distortions for the politician. An incumbent politician is less willing to reveal her competence to voters as the value of officehold-ing increases. Proposition 3.3 provides a formal statement of these results. Figure 3.3 represents graphically the difference in reelection probability for different levels of majority information.

Proposition 3.3 *The majority is able to exert more control over first period policy, or $\overline{N}_s$ increases, as*

- *majority information improves (i.e., $\alpha \to 1$);*

- *office-holding motivations increase (i.e., $\tau \to 1$).*

Candidate Selection

Now I consider the case in which the minority is sufficiently large (i.e., $N_s \geq \overline{N}_s$) such that the electoral benefit of pursuing the majority agenda fails to outweigh the cost of distorting first period policy. This leads politicians to exercise policy leadership in the first period—implementing the policy that maximizes social welfare—and, as a consequence, policy outcomes convey more information about candidate ability.

Policy Leadership Worsens Candidate Selection. If competent and incompetent incumbents both pursue the special interest policy, policy outcomes will reveal information about the incumbent's ability. If the special interest coalition is sufficiently small—or the majority sufficiently large—the information about the incumbent's ability transmitted by the policy outcome enables the majority to better select against competence. This worsens equilibrium selection as less competent politicians are retained more often.

This contrasts with the logic of standard electoral accountability models in which the majority interest aligns with socially optimal candidate selection—such that providing voters with more information about candidate ability only enhances selection. However, the result that policy leadership may actually worsen selection if the majority is weary of competence provides a distinct mechanism by which increased voter information worsens aggregate welfare. In this case, more information does not induce pathological policymaking incentives for politicians (e.g., to implement policies that obscure their skill), rather it enables the majority to better select inept representatives.

Proposition 3.4 *Define $\widehat{N}_s \equiv N^* - F_0^{-1}(F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha))$. If the special interest coalition is moderately sized (i.e., $\overline{N}_s \leq N_s < \widehat{N}_s$), policy leadership in the first period worsens electoral selection, or $\Pr(\theta = 1 | t = 2) = \tilde{\kappa} < \kappa$.*

Policy Leadership Improves Candidate Selection. If the special interest coalition is large—or the majority sufficiently small—the additional information about the incumbent's ability enables the special interest constituency to select competent politicians. This recreates results from standard political agency models: that more information about a politician's ability improves electoral selection.
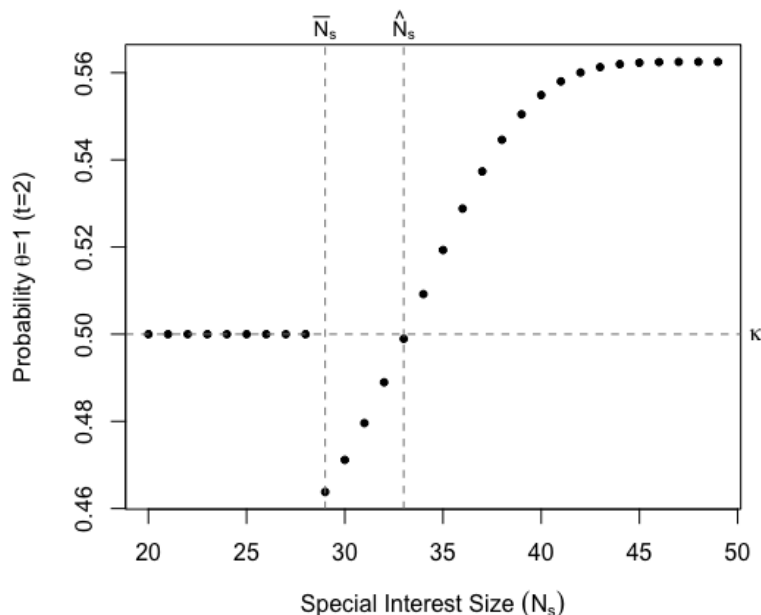
Figure 3.4: Equilibrium Selection

Note: The figure is constructed assuming $\rho = 4, N = 99, \alpha = 0.5, \kappa = 0.5, \lambda = 0.75$.

Proposition 3.5 *If the special interest coalition is sufficiently large (i.e., $N_s \geq \widehat{N}_s$), policy leadership in the first period improves electoral selection, or $\tilde{\kappa} \geq \kappa$.*

3.6 Conclusion

In this paper, a majority may exercise control over policy directly—by inducing politicians to pursue to its interests in order to gain reelection—or indirectly—by electing less competent candidates. In this framework, a majority voter prefers an incompetent representative precisely because the incompetent representative is less politically effective. If the majority understands that the special interest coalition is better able to influence the incumbent's actions and the special interest agenda is at odds with the interests of the majority, the majority will seek to elect a less competent politician to undermine the incumbent's ability to effectively pursue the special interest agenda in the future.

The analysis suggests that the extent to which a constituency is able to induce accountability amongst incumbent politicians depends critically on the information

available to each group. Poor information limits the majority's ability to effectively coordinate on electoral sanctions or rewards. This undermines the majority's ability to both influence first period policy by threatening dismissal and influence second period policy by retaining only less competent politicians.

The results demonstrate that more voter information may actually worsen social welfare by enabling a less informed majority to more effectively select worse candidates. If politicians select first period policy to maximize social welfare, first period policy outcomes will convey more information about political expertise. This additional information enables the majority to better screen candidates, which worsens candidate selection if the majority is sufficiently large. This highlights that policy incentives to 'do the right thing' do not necessarily improve longrun policy outcomes.

BIBLIOGRAPHY

Aberbach, Joel D and Bert A Rockman (2000). "Senior executives in a changing political environment". In: *The Future of Merit: Twenty Years After the Civil Service Reform Act*, pp. 81–99.

Acs, Alex (2018). "Policing the Administrative State". In: *The Journal of Politics* 80.4, pp. 1225–1238.

– (2021). "Presidential directives in a resistant bureaucracy". In: *Journal of Public Policy* 41.4, pp. 776–797. DOI: 10.1017/S0143814X20000264.

Alexander, Dan and Darrian Stacy (2021). "The Process and Perils of Coming Around". In:

Ashworth, Scott (2012). "Electoral Accountability: Recent Theoretical and Empirical Work". In: *Annual Review of Political Science* 15, pp. 183–201.

Ashworth, Scott and Ethan Bueno de Mesquita (2008). "Electoral Selection, Strategic Challenger Entry, and the Incumbency Advantage". In: *The Journal of Politics* 70.04, pp. 1006–1025.

Ashworth, Scott, Ethan Bueno de Mesquita, and Amanda Friedenberg (2017). "Accountability and Information in Elections". In: *American Economic Journal: Microeconomics* 9.2, pp. 95–138.

Ashworth, Scott and Ethan Bueno De Mesquita (2014). "Is Voter Competence Good for Voters?: Information, Rationality, and Democratic Performance". In: *American Political Science Review* 108.3, pp. 565–587.

Austen-Smith, David and Jeffrey S Banks (1989). "Electoral Accountability and Incumbency". In: *Models of Strategic Choice in Politics*. Ed. by Peter Ordeshook. Ann Arbor, MI: University of Michigan Press.

Austen-Smith, David and John R Wright (1994). "Counteractive Lobbying". In: *American Journal of Political Science*, pp. 25–44.

Banks, Jeffrey S and Joel Sobel (1987). "Equilibrium selection in signaling games". In: *Econometrica: Journal of the Econometric Society*, pp. 647–661.

Banks, Jeffrey S and Rangarajan Sundaram (1993). "Adverse Selection and Moral Hazard in Repeated Elections Model". In: *Political Economy: Institutions, Information, Competition and Representation*. Ed. by W. Barnett et al. New York: Cambridge University Press.

Banks, Jeffrey S and Rangarajan K Sundaram (1998). "Optimal Retention in Agency Problems". In: *Journal of Economic Theory* 82.2, pp. 293–323.

Benn, Annie (2022). "Measuring Delegation in Presidential Unilateral Actions". In:

Bertelli, Anthony M. and Christian R. Grose (2009). "Secretaries of Pork? A New Theory of Distributive Public Policy". In: *The Journal of Politics* 71.3, pp. 926–945. DOI: 10.1017/S002238160909080X. eprint: https://doi.org/10.1017/S002238160909080X. URL: https://doi.org/10.1017/S002238160909080X.

Bertelli, Anthony and Sven E Feldmann (2007). "Strategic appointments". In: *Journal of Public Administration Research and Theory* 17.1, pp. 19–38.

Besley, Timothy (2006). *Principled agents?: The political economy of good government*. Oxford University Press on Demand.

Buisseret, Peter and Carlo Prato (2016). "Electoral control and the human capital of politicians". In: *Games and Economic Behavior* 98, pp. 34–55.

Burke, John P (2000). *The institutional presidency: Organizing and managing the White House from FDR to Clinton*. Johns Hopkins University Press.

Canes-Wrone, Brandice, Michael C Herron, and Kenneth W Shotts (2001). "Leadership and Pandering: A Theory of Executive Policymaking". In: *American Journal of Political Science*, pp. 532–550.

Carpenter, Daniel (2010). *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton University Press. ISBN: 9780691141800. URL: http://www.jstor.org/stable/j.ctt7t5st (visited on 08/20/2022).

Carpenter, Daniel P (2010). *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton University Press.

Carroll, James D. (1987). "Public Administration in the Third Century of the Constitution: Supply-Side Management, Privatization, or Public Investment?" In: *Public Administration Review* 47.1, pp. 106–114. ISSN: 00333352, 15406210. URL: http://www.jstor.org/stable/975477 (visited on 11/08/2022).

Cohen, David M (1998). "Amateur government". In: *Journal of Public Administration Research and Theory* 8.4, pp. 450–497.

Devine, D.J. (1991). *Reagan's Terrible Swift Sword: Reforming & Controlling the Federal Bureaucracy*. Jameson Books. ISBN: 9780898031638. URL: https://books.google.com/books?id=ClGHAAAAMAAJ.

Di Tella, Rafael and Julio J. Rotemberg (Dec. 2016). "Populism and the Return of the 'Paranoid Style': Some Evidence and a Simple Model of Demand for Incompetence as Insurance against Elite Betrayal". In: *www.nber.org/papers/w22975*. National Bureau of Economic Research Working Paper.

Dickinson, Matthew J (2009). "We all want a revolution: Neustadt, new institutionalism, and the future of presidency research". In: *Presidential Studies Quarterly* 39.4, pp. 736–770.

Downs, Anthony (1957). *An Economic Theory of Democracy*. New York: Harper and Brothers.

Dunn, Delmer (1997). *Politics and administration at the top: Lessons from down under*. University of Pittsburgh Press.

Edwards, George C. (2001). "Why not the best? The loyalty-competence trade-off in presidential appointments". In: *Brookings Review* 19, pp. 12–16.

Egorov, Georgy and Konstantin Sonin (2011). "Dictators and Their Viziers: Endogenizing the Loyalty–Competence Trade-Off". In: *Journal of the European Economic Association* 9.5, pp. 903–930.

Epstein, David and Sharyn O'Halloran (1994). "Administrative procedures, information, and agency discretion". In: *American Journal of Political Science* 38.3, pp. 697–722.

– (1999). "Asymmetric information, delegation, and the structure of policy-making". In: *Journal of Theoretical Politics* 11.1, pp. 37–56.

Fearon, James D (1999). "Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance". In: *Democracy, accountability, and representation* 55, p. 61.

Ferejohn, John (1986). "Incumbent Performance and Electoral Control". In: *Public Choice* 50.1-3, pp. 5–25.

Fox, Justin and Stuart V Jordan (2011). "Delegation and accountability". In: *The Journal of Politics* 73.3, pp. 831–844.

Fox, Justin and Kenneth W Shotts (2009). "Delegates or Trustees? A Theory of Political Accountability". In: *The Journal of Politics* 71.4, pp. 1225–1237.

Gailmard, Lindsey (2022). "The Politics of Presidential Removals". In:

Gailmard, Sean and John W Patty (2007). "Slackers and zealots: Civil service, policy discretion, and bureaucratic expertise". In: *American Journal of Political Science* 51.4, pp. 873–889.

– (2019). "Preventing prevention". In: *American Journal of Political Science* 63.2, pp. 342–352.

Gilens, Martin and Benjamin I Page (2014). "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens". In: *Perspectives on politics* 12.03, pp. 564–581.

Golden, Marissa Martino (2000). *What motivates bureaucrats?: Politics and administration during the Reagan years*. Columbia University Press.

Grossman, Gene M and Elhanan Helpman (1996). "Electoral Competition and Special Interest Politics". In: *The Review of Economic Studies* 63.2, pp. 265–286.

Harrington Jr, Joseph E (1993). "Economic Policy, Economic Performance, and Elections". In: *The American Economic Review*, pp. 27–42.

Heclo, Hugh (1977). *A Government of Strangers: Executive Politics in Washington*.

Hirsch, Alexander V (2016). "Experimentation and persuasion in political organizations". In: *American Political Science Review* 110.1, pp. 68–84.

Holmström, Bengt (1999). "Managerial incentive problems: A dynamic perspective". In: *The review of Economic studies* 66.1, pp. 169–182.

Izzo, Federica (2018). "Do We Get the Best Candidates When We Need Them the Most?" In: *https://www.federicaizzo.com/pdf/DWG_2018_09_06.pdf*.

Kartik, Navin and Richard Van Weelden (2019). "Informative cheap talk in elections". In: *The Review of Economic Studies* 86.2, pp. 755–784.

Kaufman, Herbert (1956). "Emerging conflicts in the doctrines of public administration". In: *American Political Science Review* 50.4, pp. 1057–1073.

Kaufman, Herbert A (1981). *The Administrative Behavior of Federal Bureau Chiefs*. Brookings Institution Press.

Kennedy, Joshua B (2015). ""'Do this! do that!' and nothing will happen" Executive orders and bureaucratic responsiveness". In: *American Politics Research* 43.1, pp. 59–82.

Krause, George A (2009). "Organizational complexity and coordination dilemmas in US executive politics". In: *Presidential Studies Quarterly* 39.1, pp. 74–88.

Krause, George A. and Anne Joseph O'Connell (2016). "Experiential Learning and Presidential Management of the U.S. Federal Bureaucracy: Logic and Evidence from Agency Leadership Appointments". In: *American Journal of Political Science* 60.4, pp. 914–931. DOI: `https://doi.org/10.1111/ajps.12232`. eprint: `https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12232`. URL: `https://onlinelibrary.wiley.com/doi/abs/10.1111/ajps.12232`.

Krause, George A. and Anne Joseph O'Connell (2019). "Loyalty–Competence Trade-offs for Top U.S. Federal Bureaucratic Leaders in the Administrative Presidency Era". In: *Presidential Studies Quarterly* 49.3, pp. 527–550. DOI: `https://doi.org/10.1111/psq.12525`. eprint: `https://onlinelibrary.wiley.com/doi/pdf/10.1111/psq.12525`. URL: `https://onlinelibrary.wiley.com/doi/abs/10.1111/psq.12525`.

Krause, George A and Brent M Dupay (2009). "Coordinated action and the limits of presidential control over the bureaucracy: lessons from the Bush presidency". In: *President George W. Bush's Influence over Bureaucracy and Policy*. Springer, pp. 81–101.

Levy, Gilat (2000). "Strategic consultation in the presence of career concerns". In: *LSE STICERD Research Paper No. TE404*.

– (2004). "Anti-herding and strategic consultation". In: *European Economic Review* 48.3, pp. 503–525. ISSN: 0014-2921. DOI: `https://doi.org/10.1016/S0014-2921(03)00019-9`. URL: `https://www.sciencedirect.com/science/article/pii/S0014292103000199`.

Lewis, David E (2005). "Staffing Alone: Unilateral Action and the Politicization of the Executive Office of the President, 1988-2004". In: *Presidential Studies Quarterly* 35.3, pp. 496–514.

– (2010). "The politics of presidential appointments". In: *The Politics of Presidential Appointments*. Princeton University Press.

– (2011). "Presidential appointments and personnel". In: *Annual Review of Political Science* 14, pp. 47–66.

Lohmann, Susanne (1998). "An Information Rationale for the Power of Special Interests". In: *American Political Science Review* 92.4, pp. 809–827.

Lowande, Kenneth (2018). "Delegation or unilateral action?" In: *The Journal of Law, Economics, and Organization* 34.1, pp. 54–78.

Lowande, Kenneth and Jon C Rogowski (2021). "Presidential unilateral power". In: *Annual Review of Political Science* 24, pp. 21–43.

Mann, James (2004). *The rise of the vulcans*. Penguin Books.

Maskin, Eric and Jean Tirole (2004). "The Politician and the Judge: Accountability in Government". In: *American Economic Review* 94.4, pp. 1034–1054.

McCarty, Nolan (2004). "The appointments dilemma". In: *American Journal of Political Science* 48.3, pp. 413–428.

Miller, Gary J. and Terry M. Moe (1983). "Bureaucrats, Legislators, and the Size of Government". In: *The American Political Science Review* 77.2, pp. 297–322. ISSN: 00030554, 15375943.

Moe, Terry (1985). "The politicized presidency". In: *The new direction in American politics*. Ed. by John Chubb and Paul Peterson. Brookings Institution.

Moe, Terry M. and Scott A. Wilson (1994). "Presidents and the Politics of Structure". In: *Law and Contemporary Problems* 57.2, pp. 1–44. ISSN: 00239186.

Nathan, Richard P (1983). *The administrative presidency*. John Wiley & Sons.

Niskanen, William (1971). *Bureaucracy and Representative Government*. Chicago: Aldine-Atherton.

Olson, Mancur (1965). *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.

Pfiffner, James P. (1987). "Political Appointees and Career Executives: The Democracy-Bureaucracy Nexus in the Third Century". In: *Public Administration Review* 47.1, pp. 57–65. ISSN: 00333352, 15406210. URL: http://www.jstor.org/stable/975472.

Potter, Rachel Augustine (2019). *Bending the rules: Procedural politicking in the bureaucracy*. University of Chicago Press.

Prato, Carlo and Ian Turner (2022). "Institutional Foundations of the Power to Persuade". In:

Randall, Ronald (1979). "Presidential power versus bureaucratic intransigence: The influence of the Nixon administration on welfare policy". In: *American Political Science Review* 73.3, pp. 795–810.

Rodman, Peter W (2010). *Presidential Command: Power, Leadership, and the Making of Foreign Policy from Richard Nixon to George W. Bush*. Vintage.

Rudalevige, Andrew (2012). "The contemporary presidency: executive orders and presidential unilateralism". In: *Presidential Studies Quarterly* 42.1, pp. 138–160.

Rumsfeld, Donald (2011). *Known and unkown: a memoir*. Sentinel.

Schnakenberg, Keith E (2018). "Candidate Traits in Elections: When Good News for Selection is Bad News for Accountability". In: *http://dx.doi.org/10.2139/ssrn.3214737*.

Shotts, Kenneth W. and Alan E. Wiseman (2010). "The Politics of Investigations and Regulatory Enforcement by Independent Agents and Cabinet Appointees". In: *The Journal of Politics* 72.1, pp. 209–226. DOI: 10.1017/S0022381609990570. eprint: https://doi.org/10.1017/S0022381609990570. URL: https://doi.org/10.1017/S0022381609990570.

Snyder, James and Michael Ting (2008). "Interest Groups and the Electoral Control of Politicians". In: *Journal of Public Economics* 92, pp. 482–500.

Stewart Jr, Joseph and Jane S Cromartie (1982). "Partisan presidential change and regulatory policy: The case of the FTC and deceptive practices enforcement, 1938—1974". In: *Presidential Studies Quarterly*, pp. 568–573.

Waterman, Richard W. and Yu Ouyang (2020). "Rethinking Loyalty and Competence in Presidential Appointments". In: *Public Administration Review* 80.5, pp. 717–732. DOI: https://doi.org/10.1111/puar.13212. eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/puar.13212. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/puar.13212.

Wills, Gary (1982). *The Kennedy Imprisonment*. Atlantic/Little Brown.

Wilson, James Q (1995). *Bureaucracy: What Government Agencies Do and Why They Do It*. Free Press.

Wood, B Dan (1990). "Does politics make a difference at the EEOC?" In: *American Journal of Political Science*, pp. 503–530.

Wood, B Dan and James E Anderson (1993). "The politics of US antitrust regulation". In: *American Journal of Political Science*, pp. 1–39.

Wood, B Dan and Richard W Waterman (1991a). "The dynamics of political control of the bureaucracy". In: *American Political Science Review* 85.3, pp. 801–828.

– (1991b). "The Dynamics of Political Control of the Bureaucracy". In: *The American Political Science Review* 85.3, pp. 801–828. ISSN: 00030554, 15375943. URL: http://www.jstor.org/stable/1963851.

Zegart, Amy B (2000). *Flawed by Design: The Evolution of the CIA, JCS, and NSC*. Stanford University Press.

A p p e n d i x A

PROOFS FOR CHAPTER 2

A.1   Formal Proofs

Lemma 1.1 (Second Period Policy) In any equilibrium,

$$x_2^*(b_l; 1) = 0 \qquad\qquad x_2^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_2^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_2^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).$$

Proof of Lemma 1.1. In the second period, a bureaucrat will exert effort only if

$$\theta(1 - |b - x_2|) \geq c$$

which holds only if

$$b + \left(1 - \frac{c}{\theta}\right) \geq x_2 \geq b - \left(1 - \frac{c}{\theta}\right).$$

The appointee always prefers to induce effort ($e_2 = 1$). Given the appointee's ideal policy is $x = 0$, the appointee prefers $x^*(b; \theta) = 0$ if

$$b - \left(1 - \frac{c}{\theta}\right) \leq 0 \Rightarrow b \leq 1 - \frac{c}{\theta}$$

or $x^*(b; \theta) = b - \left(1 - \frac{c}{\theta}\right)$ if $b > 1 - \frac{c}{\theta}$. ∎

Remark 1 Given assumption 1.1 ,

$$x_2^*(b_l; 1) = 0 < x_2^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right) < x_2^*(b_h; 1) = b_h - (1-c) < x_2^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).$$

Proof of Remark 1. First I show $x_2^*(b; 1) < x_2^*(b; \theta_l)$:

$$0 < b_l - \left(1 - \frac{c}{\theta_l}\right) \qquad\qquad \Rightarrow b_l > 1 - \frac{c}{\theta_l}$$

$$b_h - (1 - c) < b_h - \left(1 - \frac{c}{\theta_l}\right) \qquad\qquad \Rightarrow \theta_l < 1$$

which are implied by assumption 1.1 and $\theta_l \in (0, 1)$.

Now, I show $x_2^*(b_l; \theta_l) < x_2^*(b_h; 1)$:

$$b_l - \left(1 - \frac{c}{\theta_l}\right) < b_h - (1 - c) \Rightarrow b_l + c\left(\frac{1}{\theta_l} - 1\right) < b_h.$$

∎

Lemma 1.2 (Appointee Retention) The president will retain an appointee only if $\hat{\tau} \geq \tau$. Otherwise, if $\hat{\tau} < \tau$, the president dismisses the appointee.

Proof of Lemma 1.2. Given second period bureaucratic cooperation and policymaking (Lemma 1.1), the president's expected second period utility given an appointee of type θ is

$$\mathbb{E}u_2^P(\theta, b) = \begin{cases} \theta & \text{if } b \leq 1 - \frac{c}{\theta} \\ \theta\left(2 - \left(b + \frac{c}{\theta}\right)\right) & \text{if } b > 1 - \frac{c}{\theta}. \end{cases}$$

I show $\mathbb{E}u_2^P(1, b) > \mathbb{E}u_2^P(\theta_l, b)$ for $b \in \{b_l, b_h\}$:

$$1 > \theta_l\left(2 - \left(b_l + \frac{c}{\theta_l}\right)\right) \Rightarrow b_l > 2 - \frac{(1 + c)}{\theta_l} \qquad \text{if } b = b_l \qquad \text{(A.1)}$$

$$2 - (b_h + c) > \theta_l\left(2 - \left(b_h + \frac{c}{\theta_l}\right)\right) \Rightarrow (1 - \theta_l)(2 - b_h) > 0 \quad \text{if } b = b_h. \qquad \text{(A.2)}$$

Condition A.1 is implied by assumption 1.1

$$b_l > 1 - \frac{c}{\theta_l} > 2 - \frac{(1 + c)}{\theta_l},$$

while condition A.2 is implied by $\theta_l \in (0, 1)$ and $b_h < 1$. ∎

Proposition 1.1 (Presidential Control With Sabotage) Let $\rho > \overline{\rho}$. There exists an equilibrium that satisfies the D1 refinement, in which the president maintains control over policy in the first period only if $\tau > \overline{\tau}$.

Proof of Proposition 1.1. Let $\rho > \overline{\rho}$. I show that there exists an equilibrium that satisfies the D1 refinement in which

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_1^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right)$$

only if $\tau > \bar{\tau}$. Suppose this is an equilibrium, I show that there does not exist a profitable deviation unless $\tau \leq \tau$.

First, consider first period effort incentives for the bureaucrat. In the first period, a hostile bureaucrat will exert effort only if

$$\theta(1 - |b - x_1|) \geq c.$$

If success ensures retention, an aligned bureaucrat managed by a talented appointee will exert effort only if:

$$(1 - |b_l - x|) \geq c - \delta(1 - \tau)(1 - b_l - c).$$

In contrast, if success ensures retention, an aligned bureaucrat managed by a weak appointee will exert effort only if:

$$\theta_l(1 - |b_l - x|) \geq c + \delta\theta_l\tau(1 - b_l - c).$$

Define the set of policies the aligned bureaucrat managed by a weak appointee will implement if policy success (i.e., $y = 1$) ensures retention as:

$$\mathcal{X}_\theta^l \equiv [b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\tau(1 - b_l - c), b_l + \left(1 - \frac{c}{\theta_l}\right) - \delta\tau(1 - b_l - c)].$$

Now consider policy selection incentives for appointees given bureaucratic effort. Given $\rho > \underline{\rho}$ implies

$$\delta\theta_l\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] > \theta_l\left(b_h - b_l - \left(\frac{c}{\theta_l} - c\right)\right),$$

a weak appointee facing an easy management problem will have no profitable deviation to an on-path action only if the bureaucrat is unwilling to implement the policy (i.e. $b_h - (1 - c) \notin \mathcal{X}_\theta^l$):

$$b_h - (1 - c) \geq b_l + \left(1 - \frac{c}{\theta_l}\right) - \delta\tau(1 - b_l - c) \Rightarrow \tau \geq \frac{\theta_l(2 - (b_h - b_l) - c) - c}{\delta\theta_l(1 - b_l - c)}$$

or

$$b_h - (1 - c) \leq b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\tau(1 - b_l - c) \Rightarrow \tau \geq \frac{\theta_l(b_h - b_l + c) - c}{\delta\theta_l(1 - b_l - c)}$$

which may be written as

$$\tau \geq \frac{\theta_l(1 - |b_l - (b_h - (1 - c))|) - c}{\delta\theta_l(1 - b_l - c)} \equiv \bar{\tau}$$

or

$$b_h \leq b_l + c \left(\frac{1}{\theta_l} - 1 \right) + \delta\tau(1 - b_l - c) \equiv \bar{b}_h.$$

A weak appointee facing a hard management problem will have no profitable deviation to an on-path action as any on-path action would lead to removal without improving policy utility.

Given off-path beliefs, $\tau^*(x, \cdot) = 0$, a talented appointee will never deviate (see Appendix A.2). Any deviation for a talented appointee would only worsen both his retention prospects and policy utility. Similarly, a weak appointee will never deviate to an off-path action, as this only worsens policy utility without improving retention prospects. ∎

Proposition 1.2 Let $b_h > \bar{b}_h$ and $\beta \geq \bar{\beta}$. Then there exists $\rho > \hat{\rho} \in (\underline{\rho}, \overline{\rho})$ such that, in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy if either the appointee is talented (i.e., $\theta = 1$) or the bureaucracy is hostile (i.e., $b = b_h$), while the weak appointee facing an easy management problem is captured and

$$x_1^*(b_l; \theta_l) = b_h - (1 - c). \tag{A.3}$$

Proof of Proposition 1.2. I show that

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_h - (1 - c)$$

$$x_1^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l} \right)$$

and $r^*(0, 1) = 1 = r^*(b_h - (1 - c), 1)$, $r(b_h - (1 - c), 0) = r^*\left(b_h - \left(1 - \frac{c}{\theta_l} \right), \cdot \right) = 0$ where

$$\tau^*(0, 1) = 1$$

$$\tau^*(b_h - (1 - c), 1) = \frac{\beta\tau}{\beta\tau + (1 - \tau)(1 - \beta)\theta_l}$$

$$\tau^*(b_h - (1 - c), 0) = 0$$

$$\tau^*\left(b_h - \left(1 - \frac{c}{\theta_l} \right), \cdot \right) = 0$$

is an equilibrium provided $\beta \geq \overline{\beta}$. For off-path actions x, $\tau^*(x, \cdot) = 0$ and $r(x, \cdot) = 0$.

Both talented appointees that face an easy management problem and talented appointees that face a hard management problem will only worsen both policy utility and retention prospects. Therefore neither will prefer to deviate. Similarly, weak appointees facing a hard management problem do not have a profitable deviation– any deviation worsens policy utility without improving retention prospects.

Finally, weak appointees facing an easy management problem will not have a profitable deviation given

$$\rho > \frac{1}{\delta}\left(b_h - b_l - \left(\frac{c}{\theta_l} - c\right)\right) + \tau\left[1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right] \equiv \underline{\rho}.$$

For proof that this equilibrium maximizes the president's welfare and $\hat{\rho} \in (\underline{\rho}, \overline{\rho})$ see Appendix A.4. For off-path beliefs see Appendix A.2. ∎

Proposition 1.3 Let $\beta \geq \overline{\beta}$ and $\rho < \hat{\rho}$. If $\hat{b} > b_h > \overline{b}_h$, then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control if the appointee is weak (i.e., $\theta = \theta_l$) or if the bureaucrat is aligned (i.e., $b = b_l$), while the talented appointee facing a hard management problem is captured, and

$$x_1^*(b_h; 1) = b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] \equiv \hat{x}. \qquad (A.4)$$

Instead, if $b_h > \hat{b}$, the president only maintains control if the bureaucrat is aligned and both talented and weak appointees facing a hard management problem are captured, $x_1^*(b_h; 1) = x_1^*(b_h; \theta_l) = \hat{x}$.

Proposition 1.4 Let $\beta < \overline{\beta}$. If $\underline{\rho} < \rho < \tilde{\rho}$, then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy if either the appointee is weak (i.e., $\theta = \theta_l$) or the bureaucracy is aligned (i.e., $b = b_l$), while the talented appointee facing a hard management problem is captured, and $x_1^*(b_h; 1) = \hat{x}$. If $\rho \geq \tilde{\rho}$, then in the equilibrium that maximizes the president's welfare and satisfies the D1 refinement, the president maintains control over policy only if the bureaucracy is aligned (i.e., $b = b_l$) and both talented and weak appointees facing a hard management problem are captured $x_1^*(b_h; \theta_l) = x_1^*(b_h; 1) = \hat{x}$.

Proof of Propositions 1.3 and 1.4. Define

$$b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] \equiv \hat{x}.$$

I show that

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_1^*(b_h; 1) = \hat{x} \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right)$$

and $r^*(0, 1) = 1 = r^*(b_h - (1 - c), 1)$, $r(b_h - (1 - c), 0) = r^*\left(b_h - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$
where

$$\tau^*(0, 1) = 1$$

$$\tau^*(\hat{x}, 1) = 1$$

$$\tau^*\left(b_l - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$$

$$\tau^*\left(b_h - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$$

is an equilibrium provided $\rho < \tilde{\rho}$. For off-path actions, x, $\tau^*(x, \cdot) = 0$ and $r^*(x, \cdot) = 0$.

A talented appointee that faces an easy management problem will only worsen both policy utility and retention prospects by deviating to any on or off path action. A talented appointee that faces a hard management problem will either worsen policy utility or retention prospects, or both from a deviation. Similarly, a weak appointee facing a hard management problem will not have a profitable deviation— any deviation worsens policy utility without improving retention prospects.

A weak appointee facing an easy management problem will not prefer to deviate to any on-path action as

$$\delta\left[\rho - \tau\left(1 - \left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] = \hat{x} - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right),$$

and any off-path deviation only worsens policy utility for the weak appointee facing an easy problem.

Now, I show that

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_1^*(b_h; 1) = \hat{x} \qquad\qquad x_1^*(b_h; \theta_l) = \hat{x}$$

and $r^*(0, 1) = 1 = r^*(\hat{x}, 1)$, $r^*\left(b_l - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = r^*(\hat{x}, 0) = 0$ where

$$\tau^*(0, 1) = 1$$

$$\tau^*(\hat{x}, 1) = \frac{\tau}{\tau + (1 - \tau)\theta_l}$$

$$\tau^*\left(b_l - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$$

$$\tau^*(\hat{x}, 0) = 0$$

is an equilibrium provided $\rho \geq \tilde{\rho}$. For off-path actions, x, $\tau^*(x, \cdot) = 0$ and $r^*(x, \cdot) = 0$.

As in the previous case, a talented appointee that faces an easy management problem will only worsen both policy utility and retention prospects if he deviates. A talented appointee that faces a hard management problem will either worsen policy utility or retention prospects, or both from a deviation. A weak appointee facing an easy management problem will not prefer to deviate to any on-path action as

$$\delta \left[\rho - \tau \left(1 - \left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] = \hat{x} - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right),$$

and any off-path deviation only worsens policy utility for the weak appointee facing an easy problem.

In this case, however, a weak appointee facing a hard management problem will not prefer to deviate given

$$\rho > \frac{1}{\delta}\left(\hat{x} - \left(b_h - \left(1 - \frac{c}{\theta_l}\right)\right)\right) + \tau(1 - \theta_l)(2 - b_h),$$

which substituting into the expression for $\hat{x}$ is satisfied:

$$0 > -\frac{1}{\delta}(b_h - b_l) - \tau\left[1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right) - (1 - \theta_l)(2 - b_h)\right] \Rightarrow \tau\theta_l - \frac{1}{\delta} < 0.$$

For proof that each of these equilibria maximizes the president's welfare and $\hat{\rho} \in (\underline{\rho}, \overline{\rho})$ see Appendix A.4. For off-path beliefs see Appendix A.2. ∎

Proposition 1.5 (Control over Policy) Let $b_h > \bar{b}_h$ and $\beta \geq \bar{\beta}$. The president exercises more control over policy in the second period (i.e., $x_2^*(b; \theta) \leq x_1^*(b; \theta)$). If $\rho > \hat{\rho}$, then first period policy control worsens as bureaucratic hostility increases (i.e., $b_h \to 1$). If $\rho < \hat{\rho}$, then first period policy control worsens as the benefits of officeholding increase (i.e., $\rho \to \hat{\rho}$).

Proof of Proposition 1.5. This is a restatement of results in Propositions 1.2–1.4 and the observation that, if $\beta \geq \bar{\beta}$ and $\rho > \hat{\rho}$.

$$\frac{\partial x_1^*(b_l; \theta_l)}{\partial b_h} = 1 > 0$$

and, if $\beta \geq \bar{\beta}$ and $\rho \leq \hat{\rho}$,

$$\frac{\partial \hat{x}}{\partial \rho} = \delta > 0.$$

∎

Proposition 1.6 Only weak appointees are captured if management problems are sufficiently likely to be hard and officeholding benefits are large (i.e., $\beta \geq \bar{\beta}, \rho > \hat{\rho}$). Only talented appointees are captured if officeholding benefits are not too large (i.e., either $\beta \geq \bar{\beta}, \rho < \hat{\rho}, b_h < \hat{b}$ or $\beta < \bar{\beta}, \rho < \tilde{\rho}$).

Proof of Proposition 1.6. This is a restatement of results in Propositions 1.2–1.4. ∎

Proposition 1.7.(Appointee Turnover) Let $b_h > \bar{b}_h$, $\beta \geq \bar{\beta}$, and $\rho > \hat{\rho}$. Then, in the equilibrium that maximizes the president's welfare, an appointee is retained (i.e., $r^* = 1$) only if policy implementation is successful (i.e., $y = 1$) and $x = 0$ or $x = b_h - (1 - c)$. The equilibrium probability the first period appointee is dismissed increases as

- the likelihood the bureaucracy is hostile increases ($\beta \to 1$);

- the weak appointee's managerial talent decreases ($\theta_l \to 0$).

Proof of Proposition 1.7. Consider the equilibrium described in Proposition 1.2. Then, on path,

$$\tau^*(0, 1) = 1$$

$$\tau^*(b_h - (1 - c), 1) = \frac{\beta\tau}{\beta\tau + (1 - \tau)(1 - \beta)\theta_l}$$

$$\tau^*(b_h - (1 - c), 0) = 0$$

$$\tau^*\left(b_h - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$$

which implies the retention behavior on path $r^*(0, 1) = r^*(b_h - (1 - c), 1) = 1$ and $r^*(b_h - (1 - c), 0) = r^*\left(b_h - \left(1 - \frac{c}{\theta_l}\right), \cdot\right) = 0$ given

$$\beta > \frac{\theta_l}{1 + \theta_l} \implies \frac{\beta\tau}{\beta\tau + (1 - \tau)(1 - \beta)\theta_l} > \tau.$$

Then, the probability a first period appointee is dismissed is

$$p = \beta + (1 - \beta)(1 - \theta_l)$$

and

$$\frac{\partial p}{\partial \beta} = \theta_l > 0, \ \frac{\partial p}{\partial \theta_l} = -(1 - \beta) < 0.$$

∎

A.2 Off-Path Beliefs

Proof of Proposition 1.1 (Off-Path Beliefs). Consider an equilibrium in which

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_1^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).$$

Then, consider off-path deviations by each type of appointee. The following characterize the set of retention probabilities, r, following policy success for which a deviation x is strictly preferred

- $\theta = 1, b = b_l$

$$r > 1 + \frac{x}{\delta \left[\rho + (1 - \tau)\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_1^l \qquad \text{if } x \in (0, 1]$$

- $\theta = 1, b = b_h$

$$r > 1 + \frac{(x - (b_h - (1 - c)))}{\delta \left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]} \equiv r_1^h \qquad \text{if } x \in (b_h - (1 - c), 1]$$

- $\theta = \theta_l, b = b_l$

$$r > \frac{\left(x - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right)\right)}{\delta \left[\rho - \tau \left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_\theta^l \quad \text{if } x \in [b_l - (1 - \frac{c}{\theta_l}), 1] \setminus b_h - (1 - c)$$

- $\theta = \theta_l, b = b_h$

$$r > \frac{\left(x - \left(b_h - \left(1 - \frac{c}{\theta_l}\right)\right)\right)}{\delta \left[\rho - \tau(1 - \theta_l)(2 - b_h)\right]} \equiv r_\theta^h \qquad \text{if } x \in (b_h - (1 - \frac{c}{\theta_l}), 1]$$

Then, for all off-path policy choices, x, $\tau^*(x, \cdot) = 0$.

Proof of Proposition 1.2 (Off-Path Beliefs). Consider an equilibrium in which

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_h - (1 - c)$$

$$x_1^*(b_h; 1) = b_h - (1 - c) \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l}\right).$$

Then, consider off-path deviations by each type of appointee. The following characterize the set of retention probabilities, r, following policy success for which a deviation x is strictly preferred.

- $\theta = 1, b = b_l$

$$r > 1 + \frac{x}{\delta \left[\rho + (1 - \tau) \left(1 - \theta_l \left(2 - b_l - \frac{c}{\theta_l} \right) \right) \right]} \equiv r_1^l \qquad \text{if } x \in (0, 1]$$

- $\theta = 1, b = b_h$

$$r > 1 + \frac{(x - (b_h - (1 - c)))}{\delta \left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h) \right]} \equiv r_1^h \qquad \text{if } x \in (b_h - (1 - c), 1]$$

- $\theta = \theta_l, b = b_l$

$$r > 1 + \frac{(x - (b_h - (1 - c)))}{\delta \left[\rho - \tau \left(1 - \theta_l \left(2 - b_l - \frac{c}{\theta_l} \right) \right) \right]} \equiv r_\theta^l \quad \text{if } x \in [b_l - (1 - \frac{c}{\theta_l}), 1] \setminus b_h - (1 - c)$$

- $\theta = \theta_l, b = b_h$

$$r > \frac{\left(x - \left(b_h - \left(1 - \frac{c}{\theta_l} \right) \right) \right)}{\delta \left[\rho - \tau (1 - \theta_l)(2 - b_h) \right]} \equiv r_\theta^h \qquad \text{if } x \in (b_h - (1 - \frac{c}{\theta_l}), 1]$$

Then, for all off-path policy choices, x, $\tau^*(x, \cdot) = 0$, while $\tau^*(x, 0) = 0$.

Proof of Proposition 1.3 (Off-Path Beliefs). Define

$$b_l - \left(1 - \frac{c}{\theta_l} \right) + \delta \left[\rho - \tau \left(1 - \theta_l \left(2 - b_l - \frac{c}{\theta_l} \right) \right) \right] \equiv \hat{x}.$$

First, consider an equilibrium in which

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l} \right)$$

$$x_1^*(b_h; 1) = \hat{x} \qquad\qquad x_1^*(b_h; \theta_l) = b_h - \left(1 - \frac{c}{\theta_l} \right).$$

Then, consider off-path deviations by each type of appointee. The following characterize the set of retention probabilities, r, following policy success for which a deviation x is strictly preferred.

- $\theta = 1, b = b_l$

$$r > 1 + \frac{x}{\delta \left[\rho + (1 - \tau)\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_1^l \qquad \text{if } x \in (0, 1]$$

- $\theta = 1, b = b_h$

$$r > 1 + \frac{(x - \hat{x})}{\delta \left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]} \equiv r_1^h \quad \text{if } x \in (b_h - (1 - c), 1] \setminus \hat{x}$$

- $\theta = \theta_l, b = b_l$

$$r > \frac{\left(x - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right)\right)}{\delta \left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_\theta^l \quad \text{if } x \in [b_l - (1 - \frac{c}{\theta_l}), 1] \setminus \hat{x}$$

- $\theta = \theta_l, b = b_h$

$$r > \frac{\left(x - \left(b_h - \left(1 - \frac{c}{\theta_l}\right)\right)\right)}{\delta \left[\rho - \tau(1 - \theta_l)(2 - b_h)\right]} \equiv r_\theta^h \qquad \text{if } x \in (b_h - (1 - \frac{c}{\theta_l}), 1]$$

By definition, $\hat{x}$ is the policy that leaves the weak type facing an easy management indifferent between distorting policy to gain retention with certainty and not distorting policy, which ensures removal. This means that the retention threshold for a weak type facing an easy problem may be rewritten as

$$r > 1 + \frac{(x - \hat{x})}{\delta \left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]}.$$

Then, for all off-path policy choices, x, $\tau^*(x, \cdot) = 0$.

Now, consider an equilibrium in which

$$x_1^*(b_l; 1) = 0 \qquad\qquad x_1^*(b_l; \theta_l) = b_l - \left(1 - \frac{c}{\theta_l}\right)$$

$$x_1^*(b_h; 1) = \hat{x} \qquad\qquad x_1^*(b_h; \theta_l) = \hat{x}.$$

Then, consider off-path deviations by each type of appointee. The following characterize the set of retention probabilities, r, following policy success for which a deviation x is strictly preferred.

- $\theta = 1, b = b_l$

$$r > 1 + \frac{x}{\delta \left[\rho + (1 - \tau)\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_1^l \qquad \text{if } x \in (0, 1]$$

- $\theta = 1, b = b_h$

$$r > 1 + \frac{(x - \hat{x})}{\delta \left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]} \equiv r_1^h \quad \text{if } x \in (b_h - (1 - c), 1] \setminus \hat{x}$$

- $\theta = \theta_l, b = b_l$

$$r > \frac{\left(x - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right)\right)}{\delta \left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]} \equiv r_\theta^l \quad \text{if } x \in [b_l - (1 - \frac{c}{\theta_l}), 1] \setminus \hat{x}$$

- $\theta = \theta_l, b = b_h$

$$r > 1 + \frac{(x - \hat{x})}{\delta \left[\rho - \tau(1 - \theta_l)(2 - b_h)\right]} \equiv r_\theta^h \quad \text{if } x \in (b_h - (1 - \frac{c}{\theta_l}), 1] \setminus \hat{x}$$

Then, for all off-path policy choices, x, $\tau^*(x, \cdot) = 0$.

Proof of Proposition 1.4 (Off-Path Beliefs). If $\rho < \tilde{\rho}$, then off-path beliefs are captured by the first case in the proof of Proposition 1.3. If $\rho \geq \tilde{\rho}$, then off-path beliefs are captured by the second case in the proof of Proposition 1.3.

A.3 Structure of Equilibrium Strategies

Lemma A.1 *In any equilibrium that satisfies the D1 refinement, $x_1^*(b_l; 1) = 0$.*

Proof of Lemma A.1. I show there do not exist equilibria in which $x_1^*(b_l; 1) > 0$ that satisfy the D1 refinement. Suppose there exists an equilibrium in which $x_1^*(b_l; 1) > 0$.

First observe that weak managers can never choose $x_1 = 0$ and generate successful implementation (i.e., $y = 1$). For $e_1(\theta_l; b) = 1$, then

$$b_l + \left(1 - \frac{c}{\theta_l}\right) - \delta\tau(1 - b_l - c) \geq x_1 \geq b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\tau(1 - b_l - c) \quad \text{if } b = b_l$$

$$b_h + \left(1 - \frac{c}{\theta_l}\right) \geq x_1 \geq b_h - \left(1 - \frac{c}{\theta_l}\right) \quad \text{if } b = b_h.$$

In contrast, skilled managers can choose $x_t = 0$ and always produce success if $b = b_l$. This means off path, $\hat{\tau}(x_1 = 0, y_1 = 1) = 1$.

Given $\hat{\tau}(x_1 = 0, y_1 = 1) = 1$, $x_1 = 0$ is always profitable deviation for a talented appointee from the equilibrium profile if $b = b_l$ given $x_1 = 0$ maximizes the appointee's policy utility:

$$1 > 1 - x_1^*$$

for any $x_1^* \in (0, 1]$. Further observe that in any equilibrium in which $x_1(b_l; 1) = 0$, the talented appointee facing an aligned bureaucracy is always retained. ∎

Lemma A.2 *Define*

$$b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] \equiv \hat{x}.$$

If $b = b_l$, there does not exist an equilibrium in which a weak appointee chooses $x^* > \hat{x}$.

Proof of Lemma A.2. I show that for any probability of retention following $x^* > \hat{x}$, $x = b_l - (1 - \frac{c}{\theta_l})$ is a profitable deviation for a weak appointee facing an easy problem:

$$\delta\left[\rho - \tau\left(1 - \left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right] < x^* - \left(b_l - \left(1 - \frac{c}{\theta_l}\right)\right)$$

which always holds given

$$x^* > \hat{x} \equiv b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right].$$

∎

Lemma A.3 *If $b = b_l$, a weak appointee cannot be indifferent between policies $x', x'' \in [b_h - (1 - c), \hat{x}]$. If $b = b_h$, a weak appointee cannot be indifferent between policies $x', x'' \in (b_h - (1 - \frac{c}{\theta_l}), 1]$.*

Proof of Lemma A.3. Consider two cases:

- $\hat{x} < b_h - \left(1 - \frac{c}{\theta_l}\right)$

  First notice, only a weak appointee facing an easy management problem and talented appointee facing a hard management problem can generate success with policies $x \in [b_h - (1 - c), \hat{x}]$.

  Suppose actions x', x'' are chosen by a weak appointee. Then, for this to be an equilibrium, these actions must also be on-path for a talented appointee— otherwise the weak appointee would be removed and would have a strictly profitable deviation to $x = b_l - \left(1 - \frac{c}{\theta_l}\right)$. I show that both talented appointees that face a hard problem and weak appointees that face an easy problem cannot be indifferent. For any on-path actions, $x', x'' \in [b_h - (1 - c), \hat{x}]$, the following conditions cannot both be satisfied

  $$r' - r'' = \frac{x' - x''}{\delta\left[\rho - \tau\left(1 - \theta_l(2 - b_l - \frac{c}{\theta_l})\right)\right]} \neq \frac{x' - x''}{\delta\left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]}.$$

- $\hat{x} \geq b_h - \left(1 - \frac{c}{\theta_l}\right)$

  Now, both weak appointees facing an easy management problem and weak appointees facing a hard management problem can generate success with policies $x \in (b_h - \left(1 - \frac{c}{\theta_l}\right), \hat{x}]$.

  For the weak appointee facing an easy management problem, again we have that, for any on-path actions, $x', x'' \in [b_h - (1 - c), \hat{x}]$, the following conditions cannot both be satisfied

  $$r' - r'' = \frac{x' - x''}{\delta\left[\rho - \tau\left(1 - \theta_l(2 - b_l - \frac{c}{\theta_l})\right)\right]} \neq \frac{x' - x''}{\delta\left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]}.$$

Similarly, for the weak appointee facing a hard management problem and $x', x'' \in \left(b_h - \left(1 - \frac{c}{\theta_l}\right), 1\right]$, we have that

$$r' - r'' = \frac{x' - x''}{\delta\left[\rho - \tau(1 - \theta_l)(2 - b_h)\right]} \neq \frac{x' - x''}{\delta\left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]}.$$

This implies that weak appointees choose at most one policy $x \in [b_h - (1 - c), \hat{x}]$ if $b = b_l$ and at most one policy $x \in (b_h - (1 - \frac{c}{\theta_l}, 1]$ if $b = b_h$. ∎

Lemma A.4 *There does not exist an equilibrium that satisfies the D1 refinement in which the talented appointee facing a hard management problem selects some $x < b_h - (1 - c)$.*

Proof of Lemma A.4. Suppose there were an equilibrium in which the talented appointee facing a hard management problem selects $x^* < b_h - (1 - c)$. Then, it must be that $r(x^*, 0) > 0$, otherwise the appointee would have a strictly profitable deviation.

For $r(x^*, 0) > 1$, it must be that $\tau^*(x^*, 0) \geq \tau$. I show that, for any probability of retention $r^*(x^*, 0) \in (0, 1]$, there exists some policy $x' \in [b_h - (1 - c), 1]$ either on or off-path such that $y = 1$ and $\hat{\tau}(x', 1) = 1$ such that x' is a profitable deviation for the talented appointee facing a hard problem.

Let $\hat{x} < b_h - \left(1 - \frac{c}{\theta_l}\right)$. If a weak appointee chooses a policy $\tilde{x} \in [b_h - (1 - c), \hat{x}]$, then it must also be chosen by a talented appointee facing a hard problem. Otherwise, the weak appointee would be dismissed with probability 1 and have a profitable deviation to $b_l - \left(1 - \frac{c}{\theta_l}\right)$. Then, $\tilde{x} + \epsilon$ is a profitable deviation for a talented appointee facing a hard problem, as off-path $\hat{\tau}(\tilde{x} + \epsilon, 1) = 1$ and policy utility in the first period is strictly greater. If a weak appointee does not choose a policy $\tilde{x} \in [b_h - (1 - c), \hat{x}]$, then $x = b_h - (1 - c)$ is a profitable deviation.

Now, instead let $\hat{x} \geq b_h - \left(1 - \frac{c}{\theta_l}\right)$. If

∎

Proposition A.1 *In any equilibrium that maximizes the president's welfare and satisfies the D1 refinement, talented appointees are retained with probability 1.*

Proof of Proposition A.1. First, I show that a talented appointee facing an easy problem is retained with probability 1 in equilibrium. From Lemma A.1, $x_1^*(b_l; 1) = 0$ which implies $r^* = 1$ if $y = 1$.

Now, I show that a talented appointee facing a hard problem must be retained with probability 1 following policy success in equilibrium. Suppose, for a contradiction, this does not hold. Then, there exists an equilibrium in which the talented appointee is dismissed with positive probability following success with some policy choice, x^*. For dismissal to be sequentially rational for the president, it must be that

$$\hat{\tau}(x^*, 1) \leq \tau,$$

which implies a weak appointee must also choose x^* with some probability and be dismissed.

If $\hat{\tau}(x^*, 1) < \tau$, then $r^*(x^*, 1) = 0$ and both talented and weak appointees will have a strictly profitable deviation to choose the position that maximizes their policy utility such that this cannot be an equilibrium profile. Therefore, a talented appointee cannot be dismissed with certainty in equilibrium.

Now suppose $\hat{\tau}(x^*, 1) = \tau$ and $r^*(x^*, 1) \in (0, 1)$.

- Case 1: $\hat{x} < b_h - \left(1 - \frac{c}{\theta_l}\right)$

  By Lemma A.3, at most one action $x \in [b_h - (1 - c), \hat{x}]$ is chosen by a weak appointee facing an easy problem. For any on-path policy $x^* \in [b_h - (1-c), \hat{x}]$ not chosen by a weak appointee facing an easy problem, the talented appointee must be retained with probability 1.

  Now consider some on-path policy, x^*, that is also chosen by a weak appointee facing an easy problem. I show that there exists a policy $x' = x^* + \epsilon$ that guarantees retention and is a profitable deviation for a talented appointee facing a hard problem unless $r^*(x^*, 1) = 1$. The policy x' is a profitable deviation if

  $$r^* < 1 - \frac{(x' - x^*)}{\delta \left[\rho + (1 - \tau)(1 - \theta_l)(2 - b_h)\right]} \equiv r'.$$

  For any $x' \in [x^*, b_h - \left(1 - \frac{c}{\theta_l}\right))$ off-path, D1 implies $\hat{\tau}(x', 1) = 1$ and $r^*(x', 1) = 1$. Then, there always exists some $\epsilon > 0$ such that $r' > r^*$ if $r^* < 1$.

- Case 2: $\hat{x} \geq b_h - \left(1 - \frac{c}{\theta_l}\right)$

  Again, by Lemma A.3, at most one action $x \in [b_h - (1 - c), \hat{x}]$ is chosen by a weak appointee facing an easy problem and at most one action $x \in [b_h - \left(1 - \frac{c}{\theta_l}\right), 1]$ is chosen by a weak appointee facing a hard problem. If the policy chosen by the talented appointee facing a hard problem is also chosen by a weak appointee facing an easy problem, then the argument proceeds as in case 1. If the policy is also chosen by a weak appointee facing a hard problem, then there is similarly a profitable deviation to $x' = x^* + \epsilon$ so long as $r^* < 1$. For any $x' \in [x^*, 1]$ off-path, D1 implies $\hat{\tau}(x', 1) = 1$ and $r^*(x', 1) = 1$.

∎

A.4 Principal Welfare Maximizing Equilibrium

Define $\hat{x}$ as the policy that leaves the weak appointee facing an easy problem indifferent between maintaining control and being removed and distorting policy, but maintaining his position:

$$\hat{x} \equiv b_l - \left(1 - \frac{c}{\theta_l}\right) + \delta\left[\rho - \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right].$$

Let $b_h > \bar{b}_h$ and $\beta \geq \bar{\beta}$. I show that there exists some $\hat{\rho} \in (\underline{\rho}, \overline{\rho})$ such that for all $\rho > \hat{\rho}$, the equilibrium involves policy distortions by a weak appointee facing an easy management problem.

There are two parameter regions to consider:

- $\overline{\rho} < \rho < \tilde{\rho}$

  If $\overline{\rho} < \rho < \tilde{\rho}$, then the president prefers a partially pooling equilibrium in which $x_1^*(b; 1) = x_2^*(b; 1)$, $x_1^*(b_l; \theta_l) = b_h - (1 - c)$ and $x_1^*(b_h; \theta_l) = x_2^*(b_h; \theta_l)$ to a fully separating equilibrium in which $x_1^*(b_l; 1) = 0$, $x_1^*(b_h; 1) = \hat{x}$, and $x_1^*(b; \theta_l) = x_2^*(b; \theta_l)$ provided:

  $$\hat{x} \geq (b_h - (1-c)) + \frac{(1-\beta)(1-\tau)\theta_l}{\beta\tau}\left[\left(b_h - b_l + c - \frac{c}{\theta_l}\right) + \delta\tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]$$

  which substituting into the expression for $\hat{x}$ may be rewritten

  $$\rho > \left[1 + \frac{(1-\beta)(1-\tau)\theta_l}{\beta\tau}\right]\left[\frac{1}{\delta}\left(b_h - b_l - \left(\frac{c}{\theta_l} - c\right)\right) + \tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right)\right]$$

  or

  $$\rho > \left[1 + \frac{(1-\beta)(1-\tau)\theta_l}{\beta\tau}\right]\overline{\rho} \equiv \rho_1.$$

  Then, $\rho_1 < \tilde{\rho}$ if

  $$b_h < b_l + \left[1 + \frac{\beta\tau}{(1-\beta)(1-\tau)\theta_l}\right]\left(\frac{c}{\theta_l} - c\right) - \delta\tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right) \equiv \hat{b}.$$

  Notice that $\rho_1 < \tilde{\rho}$ is sufficient to guarantee the partial pooling equilibrium described above is preferred to a partially pooling pooling equilibrium in which both weak and talented appointees facing hard management problems distort, choosing $\hat{x}$.

- $\rho \geq \tilde{\rho}$

  If $\rho \geq \tilde{\rho}$, the president prefers a partially pooling equilibrium in which $x_1^*(b; 1) = x_2^*(b; 1)$, $x_1^*(b_l; \theta_l) = b_h - (1 - c)$ and $x_1^*(b_h; \theta_l) = x_2^*(b_h; \theta_l)$ to partially pooling equilibrium in which $x_1^*(b_l; 1) = 0$, $x_1^*(b_l; \theta_l) = x_2^*(b_l; \theta_l)$, and $x_1^*(b_h; \theta) = \hat{x}$ if

$$\rho \geq \frac{1}{\delta}\left[\left(1 + \frac{\beta(1-\tau)\theta_l}{(\beta\tau + \beta(1-\tau)\theta_l)}\right)(b_h - b_l) - \frac{(\beta\tau + (1-\beta)(1-\tau)\theta_l)}{(\beta\tau + \beta(1-\tau)\theta_l)}\left(\frac{c}{\theta_l} - c\right)\right]$$
$$+ \left[1 + \frac{(1-\tau)(1-\beta)\theta_l}{(\beta\tau + \beta(1-\tau)\theta_l)}\right]\tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right) - \frac{(1-\tau)\tau\beta\theta_l(1-\theta_l)}{(\beta\tau + \beta(1-\tau)\theta_l)}(2 - b_h).$$

This condition may be rewritten as

$$\rho \geq \tilde{\rho} + \frac{1}{\delta}\left[\left(\frac{\beta(1-\tau)\theta_l}{(\beta\tau + \beta(1-\tau)\theta_l)}\right)(b_h - b_l) - \frac{(\beta\tau + (1-\beta)(1-\tau)\theta_l)}{(\beta\tau + \beta(1-\tau)\theta_l)}\left(\frac{c}{\theta_l} - c\right)\right] +$$
$$\left[\frac{(1-\tau)(1-\beta)\theta_l}{(\beta\tau + \beta(1-\tau)\theta_l)}\right]\tau\left(1 - \theta_l\left(2 - b_l - \frac{c}{\theta_l}\right)\right) - \frac{(1-\tau)\tau\beta\theta_l(1-\theta_l)}{(\beta\tau + \beta(1-\tau)\theta_l)}(2 - b_h) \equiv \rho_2.$$

Define $\hat{\rho}$ as

$$\hat{\rho} = \begin{cases} \rho' & \text{if } \overline{b}_h < b < \hat{b} \\ \rho'' & \text{if } b \geq \hat{b}. \end{cases}$$

Now, I show that $\hat{\rho} \in (\underline{\rho}, \overline{\rho})$. If $\overline{b}_h < b < \hat{b}$, then $\rho' < \tilde{\rho} < \overline{\rho}$ must hold. Instead, if $b \geq \hat{b}$, then the following is sufficient to guarantee $\hat{\rho} < \overline{\rho}$

$$\delta\left[\tau\beta + (1-\tau)\beta\theta_l\right]\left(\overline{\rho} - \underline{\rho}\right) > (1-\tau)\beta\theta_l\left[b_h - b_l + \delta\tau\left(b_h - (1-c) - \theta_l(b_h - b_l)\right)\right].$$

This always holds as $c < \overline{c}$ guarantees $c < \frac{1}{2}$. ∎

A p p e n d i x B

PROOFS FOR CHAPTER 3

B.1 Formal Proofs

Proof of Lemma 2.1. In the second period, an appointee with bias b_P and expertise θ_P will delegate if

$$-(b_A - b_P)^2 > -(1 - \theta_P)\text{Var}(\omega) \Rightarrow b_A - \epsilon(\theta_P) < b_P < b_A + \epsilon(\theta_P).$$

If this condition holds with equality, then the appointee is indifferent between delegating and exercising leadership and either action is a best response. ∎

Proof of Lemma 2.2. Consider two cases:

- If $b_A \leq \epsilon(\theta)$, then the following is sufficient for E to prefer an ally

$$-(1 - \kappa)b_A^2 \geq -(b_A - \epsilon(\theta))^2 - (1 - \kappa)(1 - \theta)\text{Var}(\omega)$$

  which is always satisfied given $b_A \leq \epsilon(\theta)$.

- If $b_A > \epsilon(\theta)$, then the following is sufficient for E to prefer an ally

$$-(1 - \kappa)(1 - \theta)\text{Var}(\omega) > -\kappa(b_A - \epsilon(\theta))^2 - (1 - \kappa)b_A^2$$

  which is always satisfied given $b_A > \epsilon(\theta)$.

∎

Proof of Lemma 2.3. First, I show the executive will never retain an extreme appointee with $b_P > b_A$ or $b_P < -b_A$. For all $b_P > b_A$ or $b_P < -b_A$, the executive's expected utility is strictly decreasing in $\hat{\kappa}$. The following are sufficient to guarantee the executive always prefers to replace an extreme appointee

$$-(1 - \kappa)b_A^2 > -b_A^2 \qquad \text{if } b_A \leq \epsilon(\theta) \tag{B.1}$$

$$-(1 - \kappa)(1 - \theta)\text{Var}(\omega) > -b_A^2 \qquad \text{if } b_A > \epsilon(\theta). \tag{B.2}$$

For all $-b_A \leq b_P \leq b_A$, the executive's expected utility is increasing in $\hat{\kappa}$. Consider two cases:

- If $b_A \leq \epsilon(\theta)$, then the executive will never retain an appointee if

$$-(1 - \kappa)b_A^2 > -b_P^2 \Rightarrow b_P > b_A\sqrt{(1 - \kappa)} \text{ or } b_P < -b_A\sqrt{1 - \kappa}.$$

Observe that if the bureaucrat is closely aligned with the president or

$$b_A \leq \frac{\epsilon(\theta)}{1 + \sqrt{1 - \kappa}},$$

the president will never retain an appointee if $b_P \notin \Delta^*$.

- If $b_A > \epsilon(\theta)$, then the executive will never retain an appointee if

$$-(1 - \kappa)(1 - \theta)\mathrm{Var}(\omega) > -b_P^2 \Rightarrow b_P > \epsilon(\theta)\sqrt{(1 - \kappa)} \text{ or } b_P < -\epsilon(\theta)\sqrt{(1 - \kappa)}.$$

∎

Proof of Lemma 2.4. There are four cases to consider:

- Case 1: $b_A \leq \epsilon(\theta), b_P \in \Delta^*$

  The executive will retain only if

  $$-\hat{\kappa}b_P^2 - (1 - \hat{\kappa})b_A^2 \geq -(1 - \kappa)b_A^2 \Rightarrow \hat{\kappa} \geq \frac{\kappa b_A^2}{b_A^2 - b_P^2} \equiv \overline{\kappa}.$$

- Case 2: $b_A \leq \epsilon(\theta), b_P \notin \Delta^*$

  The executive will retain only if

  $$-b_P^2 - (1 - \hat{\kappa})(1 - \theta)\mathrm{Var}(\omega) \geq -(1 - \kappa)b_A^2 \Rightarrow \hat{\kappa} \geq 1 + \frac{b_P^2 - (1 - \kappa)b_A^2}{(1 - \theta)\mathrm{Var}(\omega)} \equiv \overline{\kappa}.$$

- Case 3: $b_A > \epsilon(\theta), b_P \in \Delta^*$

  The executive will retain only if

  $$-\hat{\kappa}b_P^2 - (1 - \hat{\kappa})b_A^2 \geq -(1 - \kappa)(1 - \theta)\mathrm{Var}(\omega) \Rightarrow \hat{\kappa} \geq \frac{b_A^2 - (1 - \kappa)(1 - \theta)\mathrm{Var}(\omega)}{b_A^2 - b_P^2} \equiv \overline{\kappa}.$$

- Case 4: $b_A > \epsilon(\theta), b_P \notin \Delta^*$

  The executive will retain only if

  $$-b_P^2 - (1 - \hat{\kappa})(1 - \theta)\mathrm{Var}(\omega) \geq -(1 - \kappa)(1 - \theta)\mathrm{Var}(\omega) \Rightarrow \hat{\kappa} \geq \kappa + \frac{b_P^2}{(1 - \theta)\mathrm{Var}(\omega)} \equiv \overline{\kappa}.$$

■

Proof of Lemma 2.5. Let $\tau > \bar{\tau}$. By Lemma B.2 in Appendix B.2, in any equilibrium that satisfies the D1 refinement $\sigma_1^*(1, b_P) = 0$.

First, I show there does not exist an equilibrium in which $\sigma_1^*(\theta_l, b_P) > 0$ if $b_P \notin \Delta^*$. Consider two cases:

- If $b_A \leq \epsilon(\theta)$, I show that if $b_P \notin \Delta^*$ there does not exist $\rho(0, b_P) \in [0, 1]$ such that the non-expert appointee prefers to delegate.

  For the non-expert appointee to weakly prefer delegating to exercising leadership, the following condition must hold:

  $$\rho(0, b_P) \leq \frac{(1 - \theta)\mathrm{Var}(\omega) - (b_A - b_P)^2}{\delta \left[\tau - (1 - \theta)\mathrm{Var}(\omega) + \kappa b_P^2 + (1 - \kappa)(b_A - b_P)^2\right]}.$$

  This is not feasible as $b_P \notin \Delta^*$ implies

  $$(1 - \theta)\mathrm{Var}(\omega) - (b_A - b_P)^2 < 0$$

  whereas
  $$\tau - (1 - \theta)\mathrm{Var}(\omega) + \kappa b_P^2 + (1 - \kappa)(b_A - b_P)^2 > 0$$

  given $\tau \geq \bar{\tau}$.

  For the non-expert appointee to weakly prefer delegating, the following condition must hold:

  $$\rho(0, b_P) \leq \frac{(1 - \theta)\mathrm{Var}(\omega) - (b_A - b_P)^2}{\delta[\tau + b_P^2 - \kappa(1 - \theta)\mathrm{Var}(\omega)]}.$$

  This is not feasible as $b_P \notin \Delta^*$ implies

  $$(1 - \theta)\mathrm{Var}(\omega) - (b_A - b_P)^2 < 0$$

  whereas
  $$\tau + b_P^2 - \kappa(1 - \theta)\mathrm{Var}(\omega) > 0$$

  given $\tau \geq \bar{\tau}$.

Then, there does not exist an equilibrium in which $\sigma_1^*(\theta_l, b_P) > 0$ for $b_P \notin \Delta^*$.

Next, I show that there exists an equilibrium in which $\sigma_1^*(\theta_l, b_P) = 0$ for all $b_P \notin \Delta^*$. Given the D1 refinement requires $\kappa^*(1, b_P) = 0$, for this to be an equilibrium strategy, the following must hold

$$-(1 - \theta_l)\text{Var}(\omega) + \delta\mathbb{E}(\text{removed}) \geq -(b_A - b_P)^2 + \delta\mathbb{E}(\text{removed})$$

which is always satisfied. By Lemma B.3 in Appendix B.3, this is the unique equilibrium strategy for $b_P \notin \Delta^*$.

Similarly, if $b_P \in \Delta^*$, but $b_P \notin \mathfrak{R}$, then $\sigma_1^*(\theta_l, b_P) = \sigma_2^*(\theta_l, b_P) = 1$, given

$$-(b_A - b_P)^2 > -(1 - \theta_l)\text{Var}(\omega).$$

Now, I show that the unique equilibrium strategy is semi-separating (i.e., $\sigma_1^*(\theta_l, b_P) = 1$) for $b_P \in \Delta^* \cap \mathfrak{R}$.

- There does not exist a fully separating equilibrium in which $\sigma_1^*(\theta_l, b_P) = 1$ for $b_P \in \Delta^* \cap \mathfrak{R}$ given

$$\tau > \frac{1}{\delta}\left[(1 - \theta_l)\text{Var}(\omega) - (b_A - b_P)^2\right] - [\kappa b_P^2 - \kappa(b_A - b_P)^2]$$

  where $\tau > \bar{\tau}$ guarantees this is satisfied for all $b_P \in \Delta^* \cap \mathfrak{R}$.

- There does not exist a fully pooling equilibrium $\forall\, b_P \neq 0 \in \Delta^* \cap \mathfrak{R}$ given the D1 refinement requires off-path $\kappa^*(1, b_p) = 0$ and

$$-(b_A - b_P)^2 > -(1 - \theta_l)\text{Var}(\omega).$$

- There exists a semi-separating equilibrium for $b_P \in \Delta^* \cap \mathfrak{R}$ characterized by

$$\frac{\kappa}{\kappa + (1 - \kappa)(1 - \sigma_1^*(\theta_l, b_P))} = \bar{\kappa} \Rightarrow \sigma_1^*(\theta_l, b_P) = \frac{b_P^2}{(1 - \kappa)b_A^2}$$

  and

$$\rho^*(0, b_P) = \frac{(1 - \theta_l)\text{Var}(\omega) - (b_A - b_P)^2}{\delta(\tau - \kappa b_A(b_A - 2b_P))} \in [0, 1].$$

∎

Proof of Proposition 2.1. Let $\tau > \bar{\tau}$ and $b_A < \epsilon(\theta)$. First, observe that if $b_A \leq \frac{\epsilon(\theta)}{1 + \sqrt{1 - \kappa}}$, then $\mathfrak{R} \subset \Delta^*$. Instead, if $b_A > \frac{\epsilon(\theta)}{1 + \sqrt{1 - \kappa}}$, then Lemma 2.5 implies

$$-b_P^2 - (1 - \kappa)(1 - \theta)\text{Var}(\omega) < -(1 - \kappa)b_A^2$$

for all $b_P \in \Re \setminus \Delta^*$, which means there exists some $b_P \in \Delta^*$ that is preferred to any $b_P \in \Re \setminus \Delta^*$. By Lemma 2.2, $\beta_2^{P*} \in \Delta^*$ if $r = 0$. ∎

Proof of Proposition 2.2. Let $b_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$. In any semi-separating equilibrium, the executive's expected second period utility is equal to her expected utility from replacement:

$$-\delta(1 - \kappa)b_A^2.$$

Then, the executive will choose the ideology of her appointee to maximize first period control.

For $b_P \in \Delta^* \cap \Re$, the following conditions must be satisfied in the unique semi-separating equilibrium in which $\sigma_1^*(1, b_P) = 0$:

$$\sigma_1^*(\theta, b_P) = \frac{b_P^2}{(1 - \kappa)b_A^2} \tag{B.3}$$

$$\rho^*(0, b_P) = \frac{(1 - \theta)\text{Var}(\omega) - (b_A - b_P)^2}{\delta(\tau - \kappa b_A(b_A - 2b_P))}. \tag{B.4}$$

Note that if $b_P \in \{-b_A\sqrt{1 - \kappa}, 0, b_A\sqrt{1 - \kappa}\}$ there are many possible retention probabilities that support the same delegation behavior, but do not affect the executive's expected utility.

The executive's first period expected utility given $\sigma_1^*(\theta_P, b_P)$ is

$$-\kappa b_P^2 - (1 - \kappa)\left[\sigma_1^* b_A^2 + (1 - \sigma_1^*)(b_P^2 + (1 - \theta_l)\text{Var}(\omega))\right]$$

which, substituting into the expression, becomes

$$\frac{b_P^4}{b_A^2} + \left[\frac{(1 - \theta_l)\text{Var}(\omega)}{b_A^2} - 2\right]b_P^2 - (1 - \kappa)(1 - \theta_l)\text{Var}(\omega).$$

This is maximized at $\beta_1^{P*} \in \{\pm b_A\sqrt{1 - \kappa}\}$ provided

$$b_A - \epsilon(\theta_l) < -b_A\sqrt{1 - \kappa} \Rightarrow b_A < \frac{\epsilon(\theta_l)}{1 + \sqrt{1 - \kappa}}$$

and

$$\frac{b_P^4}{b_A^2} + \left[\frac{(1 - \theta)\text{Var}(\omega)}{b_A^2} - 2\right]b_P^2 > 0$$

which is satisfied if

$$\sqrt{2b_A^2 - (1 - \theta_l)\text{Var}(\omega)} < b_A\sqrt{1 - \kappa} \Rightarrow b_A < \frac{\epsilon(\theta_l)}{\sqrt{1 + \kappa}}.$$

If $\frac{\epsilon(\theta_l)}{1+\sqrt{1-\kappa}} < b_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$, then $\beta_1^{P*} = b_A\sqrt{1-\kappa}$. Otherwise, $\beta_1^{P*} = 0$.

Appendix B.2 provides proof of uniqueness. ∎

Proof of Proposition 2.3. Let $b_A < \epsilon(\theta)$. Given the equilibrium characterization in Proposition 2.2, $\beta_1^{P*} = b_A\sqrt{1-\kappa}$. Then,

$$\frac{\partial \beta_1^{P*}}{\partial b_A} = \sqrt{1-\kappa} > 0$$

$$\frac{\partial \beta_1^{P*}}{\partial \kappa} = -\frac{b_A}{2\sqrt{1-\kappa}} < 0.$$

∎

Proof of Proposition 2.4. This follows directly from Proposition 2.2.

Proof of Proposition 2.5. This follows directly from Lemma 2.4.

B.2 Uniqueness

The D1 criterion eliminates pooling equilibria in which delegating to the bureaucrat signals competence if $\tau > \kappa b_A^2(1 + 2\sqrt{1 - \kappa})$. I show that each type of appointee has a unique equilibrium strategy that leads to a unique expected payoff for the executive.

Lemma B.1 *In any equilibrium that satisfies the D1 refinement $\rho^*(1, b_P) = 0$.*

Proof. Suppose $\rho^*(1, b_P) > 0$. Then, $b_P \in \Re$ and, in order to satisfy $\kappa^*(1, b_P) \geq \overline{\kappa}$, on-path

$$\sigma_1^*(1, b_P) \geq \sigma_1^*(\theta, b_P). \tag{B.5}$$

There are three types of equilibria that satisfy (B.5):

- Fully separating: $\sigma_1^*(1, b_P) = 1$, $\sigma_1^*(\theta, b_P) = 0$

  First I rule out separating equilibria that involve $\sigma_1^*(1, b_P) = 1$, $\sigma_1^*(\theta, b_P) = 0$, which imply $\rho^*(0, b_P) = 0$, $\rho^*(1, b_P) = 1$. I show that a non-expert would prefer to delegate if

  $$\tau > \frac{1}{\delta}\left[(b_A - b_P)^2 - (1 - \theta)\mathrm{Var}(\omega)\right] + \mathbb{E}u_2^P(\text{removed}).$$

  This is clearly satisfied if $b_P \in \Delta^*$. If $b_P \notin \Delta^*$, then incentive compatibility for the non-expert requires

  $$\tau \leq \frac{1}{\delta}\left[(b_A - b_P)^2 - (1 - \theta)\mathrm{Var}(\omega)\right] + \left[(1 - \theta)\mathrm{Var}(\omega) - \kappa b_P^2 - (1 - \kappa)(b_A - b_P)^2\right] \quad \text{if } b_A \leq \epsilon(\theta)$$

  $$\tau \leq \frac{1}{\delta}\left[(b_A - b_P)^2 - (1 - \theta)\mathrm{Var}(\omega)\right] + \left[\kappa(1 - \theta)\mathrm{Var}(\omega) - b_P^2\right] \qquad\qquad\qquad \text{if } b_A > \epsilon(\theta).$$

  If $b_P \notin \Delta^*$, then incentive compatibility for the expert requires

  $$\tau \geq \frac{1}{\delta}\left[(b_A - b_P)^2\right] - \left[\kappa b_P^2 + (1 - \kappa)(b_A - b_P)^2\right] \qquad \text{if } b_A \leq \epsilon(\theta)$$

  $$\tau \geq \frac{1}{\delta}\left[(b_A - b_P)^2\right] - \left[b_P^2 + (1 - \kappa)(1 - \theta)\mathrm{Var}(\omega)\right] \qquad \text{if } b_A > \epsilon(\theta).$$

  Incentive compatibility for both the expert and non-expert cannot be satisfied if $\delta < 1$. This cannot be an equilibrium.

- Semi-separating: $1 > \sigma_1^*(1, b_P) > \sigma_1^*(\theta, b_P) = 0$

Now I rule out semi-separating equilibria that involve $1 > \sigma_1^*(1, b_P) > \sigma_1^*(\theta, b_P)$, which imply $\rho^*(0, b_P) = 0$ and $\sigma_1^*(\theta, b_P) = 0$ (by Lemma B.3). I show that a non-expert would prefer to delegate if

$$\rho^*(1) = \frac{(b_A - b_P)^2}{\delta[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]} > \frac{(b_A - b_P)^2 - (1 - \theta)\text{Var}(\omega)}{\delta[\mathbb{E}u_2^P(\theta, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]}.$$

This is clearly satisfied if $b_P \in \Delta^*$. If $b_P \notin \Delta^*$, then this is satisfied if

$$\tau > \kappa(b_A^2 - 2b_A b_P) \qquad \text{for all } b_A \leq \epsilon(\theta)$$
$$\tau > 0 \qquad \text{for all } b_A > \epsilon(\theta)$$

which holds given $\tau > \bar{\tau}$. Therefore, this cannot be an equilibrium.

- Fully pooling: $\sigma_1^*(1, b_P) = \sigma_1^*(\theta, b_P)$

  If $\sigma_1^*(1, b_P) = \sigma_1^*(\theta_l, b_P) = 1$, then $\kappa^*(1, b_P) = \kappa$ and $\rho^*(1, b_P) = 0$ if $b_P \neq 0$. If $b_P = 0$, then the D1 refinement requires that off-path, $\kappa^*(0, 0) = 1$ as

$$1 - \frac{(b_A^2 - (1 - \theta_l)\text{Var}(\omega))}{\delta[\mathbb{E}u_2^P(\theta_l, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]} > 1 - \frac{b_A^2}{\delta[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]}$$

  given the assumption $\tau > \bar{\tau}$. However, this cannot be an equilibrium if off-path beliefs satisfy the D1 refinement.

If $\sigma_1^*(1, b_P) = \sigma_1^*(\theta_l, b_P) = 0$, the D1 refinement requires that off-path, $\kappa^*(1, b_P) = 0$ as

$$\frac{(b_A - b_P)^2 - (1 - \theta_l)\text{Var}(\omega)}{\delta[\mathbb{E}u_2^P(\theta_l, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]} < \frac{(b_A - b_P)^2}{\delta[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed})]}$$

given the assumption $\tau > \bar{\tau}$, which implies $\rho^*(1, b_P) = 0$. ∎

Lemma B.2 *Let $\tau > \bar{\tau}$. In any equilibrium that satisfies the D1 refinement expert appointees exercise leadership, $\sigma_1^*(1, b_P) = 0$.*

Proof. An expert appointee will always prefer to exercise leadership if

$$\rho^*(0, b_P) - \rho^*(1, b_P) > \frac{-(b_A - b_P)^2}{\delta\left[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed})\right]} < 0$$

which is satisfied given $\tau > 0$ as $\rho^*(1, b_P) = 0$ implies $\rho^*(0, b_P) - \rho^*(1, b_P) \geq 0$. ∎

Proof of Proposition 2.2 (Uniqueness). I show that if $\tau > \bar{\tau}$ and $b_A < \frac{\epsilon(\theta)}{\sqrt{1+\kappa}}$, then in any equilibrium satisfying the D1 refinement, $\beta_1^{P*} = b_A\sqrt{1 - \kappa}$. By Lemma B.2

and Lemma B.3, $\sigma_1^*(1, b_P) = 0$ and $\sigma_1^*(\theta_l, b_P \in \mathfrak{R}) \in [0, 1]$. I show that for each appointee $b_P \in \mathfrak{R}$, there is a unique probability of delegation in any equilibrium that satisfies D1.

If $b_P \notin \mathfrak{R}$, then $\sigma_1^*(\theta_P, b_P) = \sigma_2^*(\theta_P, b_P)$. See proof of Lemma 2.5.

If $b_P \in \mathfrak{R}$,

- $b_P \in \Delta^*$

  There does not exist a fully separating equilibrium if

  $$\tau > \frac{1}{\delta}\left[(1 - \theta_l)\text{Var}(\omega) - (b_A - b_P)^2\right] + \kappa[b_A^2 - 2b_A b_P].$$

  There does not exist a fully pooling equilibrium if $b_P \in \Delta^* \cap \mathfrak{R} \setminus \{0\}$ if $\tau > 0$.
  There exists a semi-separating equilibrium $\forall \, b_P \in \Delta^* \cap \mathfrak{R}$ if

  $$\tau > \frac{1}{\delta}\left[(1 - \theta_l)\text{Var}(\omega) - (1 - \delta\kappa)b_A^2\right] \equiv \overline{\tau}.$$

- $b_P \notin \Delta^*$

  There does not exist a fully separating equilibrium if

  $$\tau > \frac{1}{\delta}\left[(1 - \theta)\text{Var}(\omega) - (b_A - b_P)^2\right] + \left[(1 - \theta)\text{Var}(\omega) - \kappa b_P^2 - (1 - \kappa)(b_A - b_P)^2\right].$$

  There does not exist a semi-separating equilibrium given $b_P \notin \Delta^*$ implies

  $$(1 - \theta)\text{Var}(\omega) - (b_A - b_P)^2 < 0 \Rightarrow \rho^*(0) < 0$$

  which is not feasible.

  There exists pooling equilibrium that satisfies the D1 refinement. If $\tau > \kappa b_A^2[1 + 2\sqrt{1 - \kappa}]$, then D1 criterion implies $\kappa^*(1) = 0$ as $\rho_1 > \rho_\theta$ if:

  $$\tau > \kappa[b_A^2 - 2b_A b_P].$$

  For this to hold $\forall b_P < b_A - \epsilon(\theta)$,

  $$\tau > \kappa b_A^2[1 + 2\sqrt{1 - \kappa}].$$

Then, the utility comparison in Appendix B.1 identifies the unique optimal appointee. ∎

B.3 Structure of Equilibrium Appointee Strategies

Lemma B.3 *In any PBE, at most one type of appointee is indifferent between delegating authority and exercising policy leadership.*

Proof. Suppose $\exists\, b_P \in \Re$ such that both types of appointees are indifferent. This implies for the expert appointee

$$(b_A - b_P)^2 + \delta(\rho^*(0, b_P) - \rho^*(1, b_P)) \left[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right] = 0 \quad (B.6)$$

and for the non-expert

$$(b_A - b_P)^2 - (1 - \theta_l)\text{Var}(\omega) + \delta(\rho^*(0, b_P) - \rho^*(1, b_P)) \left[\mathbb{E}u_2^P(\theta_l, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right] = 0 \quad (B.7)$$

Rearranging from each expression for $\rho^*(0) - \rho^*(1)$, this implies

$$\rho^*(0, b_P) - \rho^*(1, b_P) = \frac{-(b_A - b_P)^2}{\delta \left[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right]} \quad (B.8)$$

$$\rho^*(0, b_P) - \rho^*(1, b_P) = \frac{(1 - \theta_l)\text{Var}(\omega) - (b_A - b_P)^2}{\delta \left[\mathbb{E}u_2^P(\theta_l, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right]} \quad (B.9)$$

must hold.

For any $b_P \in \Delta^*$,

$$\frac{-(b_A - b_P)^2}{\delta \left[\mathbb{E}u_2^P(1, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right]} < 0 \leq \frac{(1 - \theta_l)\text{Var}(\omega) - (b_A - b_P)^2}{\delta \left[\mathbb{E}u_2^P(\theta_l, \text{retained}) - \mathbb{E}u_2^P(\text{removed}) \right]} \quad (B.10)$$

and expression (B.8) and (B.9) cannot both be satisfied.

For $b_P \notin \Delta^*$, the following is sufficient to guarantee both conditions cannot be satisfied:

$$\tau > \kappa b_A^2 (1 + 2\sqrt{1 - \kappa}) \qquad\qquad \text{if } b_A \leq \epsilon(\theta) \qquad (B.11)$$

$$\tau > b_A^2 (1 + 2\sqrt{1 - \kappa}) - (1 - \kappa)(1 - \theta_l)\text{Var}(\omega) \qquad \text{if } b_A > \epsilon(\theta) \qquad (B.12)$$

which is implied by $\tau > \overline{\tau}$. ∎

A p p e n d i x   C

PROOFS FOR CHAPTER 4

C.1   Formal Proofs

This appendix proves Remark 1, Lemmas 1-4, and Propositions 1-4.

Proof of Remark 3. Consider an incumbent of type θ. This is a straightforward application of Bayes' Theorem, where

$$\Pr(\omega_t = 1|\theta, w_t = 1) = \frac{\Pr(w_t = 1|\theta, \omega_t = 1)\Pr(\omega_t = 1)}{\Pr(w_t = 1|\theta, \omega_t = 1)\Pr(\omega_t = 1) + \Pr(w_t = 1|\theta, \omega_t = 0)\Pr(\omega_t = 0)}$$

$$= \frac{\theta\pi}{\theta\pi + (1 - \theta)(1 - \pi)},$$

$$\Pr(\omega_t = 1|\theta, w_t = 0) = \frac{\Pr(w_t = 0|\theta, \omega_t = 1)\Pr(\omega_t = 1)}{\Pr(w_t = 0|\theta, \omega_t = 1)\Pr(\omega_t = 1) + \Pr(w_t = 0|\theta, \omega_t = 0)\Pr(\omega_t = 0)}$$

$$= \frac{(1 - \theta)\pi}{(1 - \theta)\pi + \theta(1 - \pi)}.$$

∎

Proof of Lemma 3.1. In the second period, the incumbent will select the policy that maximizes social welfare given there is no election, or

$$\max_{\sigma_2(w_2;\theta)} \sigma_2(w_2; \theta)\left[\hat{\pi}_2(w_2; \theta)m + (1 - \hat{\pi}_2(w_2; \theta))\rho n\right] + (1 - \sigma_2(w_2; \theta))\left[\hat{\pi}_2(w_2; \theta)\rho n + (1 - \hat{\pi}_2(w_2; \theta))m\right],$$

and

$$\sigma_2^*(w_2; \theta) = \begin{cases} 1 & \text{if } \hat{\pi}_2(w_2; \theta) < \frac{1}{2} \\ 0 & \text{otherwise.} \end{cases}$$

∎

Proof of Lemma 3.2. Given Lemma 3.1, a special interest voter's expected second period utility associated with reelecting the incumbent is given by

$$(\hat{\kappa}^j + (1 - \hat{\kappa}^j)\lambda)\rho$$

whereas a majority voter's expected second period utility is

$$(1 - \hat{\kappa}^h)(1 - \lambda).$$

A special interest voter will prefer to reelect the incumbent only if

$$(\hat{\kappa}^j + (1 - \hat{\kappa}^j)\lambda)\rho \geq (\kappa + (1 - \kappa)\lambda)\rho \Rightarrow \hat{\kappa}^j \geq \kappa.$$

Similarly, a majority voter will prefer to reelect the incumbent only if

$$(1 - \hat{\kappa}^h)(1 - \lambda) \Rightarrow \hat{\kappa}^h \leq \kappa.$$

∎

Proof of Lemma 3.3. Suppose $\sigma_1^*(w_1; \theta) = 1 - w_1$. Then, this is a straightforward application of Bayes' Theorem, where

$$\hat{\kappa}_j^*(1) = \Pr(\theta = 1 | \Pi_1 = 1) = 0$$

$$\hat{\kappa}_h^*(1) = \Pr(\theta = 1 | s_1 = 1) = \frac{(1 - \frac{1}{2}(1 - \alpha))\kappa}{1 - \alpha(1 - \kappa)(1 - \lambda) - \frac{1}{2}(1 - \alpha)}$$

$$\hat{\kappa}_h^*(0) = \Pr(\theta = 1 | s_1 = 0) = \frac{\frac{1}{2}(1 - \alpha)\kappa}{\frac{1}{2}(1 - \alpha) + \alpha(1 - \kappa)(1 - \lambda)}$$

$$\hat{\kappa}_j^*(0) = \Pr(\theta = 1 | \Pi_1 = 1) = \frac{\kappa}{\kappa + \lambda(1 - \kappa)}.$$

∎

Proof of Proposition 3.1. First I show that this is indeed an equilibrium, then I prove uniqueness provided $N_s > \overline{N}_s$.

- The special interest discipline equilibrium exists.

  Suppose $\sigma_1^*(w_1; \theta) = 1 - w_1$. By Lemma 3.3, the voters' beliefs are given by

  $$0 = \hat{\kappa}_j^*(1) < \hat{\kappa}_h^*(1) < \kappa < \hat{\kappa}_h^*(0) < \hat{\kappa}_j^*(0) < 1.$$

  This implies the majority strategy $v_h^*(1) = 1$, $v_h^*(0) = 0$ and the special interest strategy $v_j^*(1) = 0$, $v_j^*(0) = 1$.

  A competent incumbent will prefer to select $x_1 = 1 - w_1$ provided

  $$\rho n - m \geq \Delta(1, 0)(\tau + (1 - \kappa)(1 - \lambda)(\rho n - m))$$

  or

  $$\Delta(1, 0) \leq \frac{\rho n - m}{\tau + (1 - \kappa)(1 - \lambda)(\rho n - m)}.$$

Rearranging the above gives the condition that

$$N_s \geq N^* - F_0^{-1}\left(F_1(N^*; M, (1+\alpha)/2) + \frac{\rho n - m}{\tau + (1-\kappa)(1-\lambda)(\rho n - m)}\right) \equiv \overline{N}_s.$$

An incompetent incumbent will prefer to select $x_1 = 1 - w_1$ provided

$$\rho n - m \geq \Delta(1,0)(\tau - \kappa(1-\lambda)(\rho n - m))$$

or

$$\Delta(1,0) \geq \frac{\rho n - m}{\tau - \kappa(1-\lambda)(\rho n - m)} \qquad \text{if } \tau < \kappa(1-\lambda)(\rho n - m) \qquad (C.1)$$

$$\Delta(1,0) \leq \frac{\rho n - m}{\tau - \kappa(1-\lambda)(\rho n - m)} \qquad \text{if } \tau > \kappa(1-\lambda)(\rho n - m). \qquad (C.2)$$

Observe that $\Delta(1,0) \geq 0$ such that for sufficiently small τ, condition (C.1) is always satisfied.

Then, consider $\tau > \kappa(1-\lambda)(\rho n - m)$. Rearranging condition (C.2) gives

$$N_s \geq N^* - F_0^{-1}\left(F_1(N^*; M, (1+\alpha)/2) + \frac{\rho n - m}{\tau - \kappa(1-\lambda)(\rho n - m)}; M, (1-\alpha)/2\right) \equiv \tilde{N}_s$$

where $\tilde{N}_s \leq \overline{N}_s$. ∎

- This equilibrium is unique if $\tau < \overline{\tau}$ or $N_s > \overline{N}_s$.

  Consider an arbitrary retention strategy for the majority voter: $v_h(1), v_h(0)$. Then, the competent politician will prefer to select $x_1 = w_1$ if and only if

  $$\Delta(v_h(1), v_h(0)) \geq \frac{\rho n - m}{\tau + (1-\kappa)(1-\lambda)(\rho n - m)}.$$

  Then, given the difference in reelection probabilities $\Delta(v_h(1), v_h(0))$ is maximized at $v_h(1) = 1$, $v_h(0) = 0$ if

  $$\Delta(1,0) < \frac{\rho n - m}{\tau + (1-\kappa)(1-\lambda)(\rho n - m)},$$

  there does not exist a feasible voter strategy that would induce $\sigma_1^*(1;1) > 0$ or $\sigma_1^*(0;1) < 1$ if $N_s > \overline{N}_s$.

  Similarly, the incompetent politician will prefer to select $x_1 = w_1$ if and only if

  $$\Delta(1,0) \geq \frac{\rho n - m}{\tau - \kappa(1-\lambda)(\rho n - m)} \qquad \text{if } \tau < \kappa(1-\lambda)(\rho n - m)$$

  $$\Delta(1,0) \leq \frac{\rho n - m}{\tau - \kappa(1-\lambda)(\rho n - m)} \qquad \text{if } \tau > \kappa(1-\lambda)(\rho n - m).$$

Then, if $N_s > \overline{N}_s$, there does not exist a feasible voter strategy that would induce $\sigma_1^*(1; \lambda) > 0$ or $\sigma_1^*(0; \lambda) < 1$. Therefore, neither type of politician will prefer reelection to the social welfare cost in period $t = 1$ if $N_s > \overline{N}_s$. ∎

Proof of Lemma 3.4. Suppose $\sigma_1^*(w_t; \lambda) = 1 - w_t$, $\sigma_1^*(1; 1) = 1 - \lambda$, $\sigma_1^*(0; 1) = \lambda$. Then, this is again a straightforward application of Bayes' Theorem, where

$$\kappa_j^*(1) = \Pr(\theta = 1|\Pi_1 = 1) = \frac{(1 - \lambda)\kappa}{(1 - \lambda)\kappa + (1 - \lambda)(1 - \kappa)} = \kappa,$$

$$\kappa_h^*(1) = \Pr(\theta = 1|s_1 = 1) = \frac{(\frac{1}{2}(1 - \alpha) + \alpha(1 - \lambda))\kappa}{(\frac{1}{2}(1 - \alpha) + \alpha(1 - \lambda))\kappa + (\frac{1}{2}(1 - \alpha) + \alpha(1 - \lambda)))(1 - \kappa)} = \kappa,$$

$$\kappa_j^*(0) = \Pr(\theta = 1|\Pi_1 = 0) = \frac{\lambda\kappa}{\lambda\kappa + \lambda(1 - \kappa)} = \kappa,$$

$$\kappa_h^*(0) = \Pr(\theta = 1|s_1 = 0) = \frac{(1 - \alpha(1 - \lambda) - \frac{1}{2}(1 - \alpha))\kappa}{(1 - \alpha(1 - \lambda) - \frac{1}{2}(1 - \alpha))\kappa + (1 - \alpha(1 - \lambda) - \frac{1}{2}(1 - \alpha))(1 - \kappa)} = \kappa.$$

∎

Proof of Proposition 3.2. Suppose $\sigma_1^*(w_1; \lambda) = 1 - w_1$, $\sigma_1^*(1; 1) = 1 - \lambda$, $\sigma_1^*(0; 1) = \lambda$. By Lemma 3.4, the voters' beliefs are given by

$$0 < \hat{\kappa}_j^*(0) = \hat{\kappa}_h^*(0) = \kappa = \hat{\kappa}_h^*(1) = \hat{\kappa}_h^*(1) < 1.$$

Consider a strategy for each majority voter given by $v_h^*(0) = 0$ and $v_h^*(1) \in (0, 1]$.

For this to be an equilibrium, competent politicians must be indifferent between selecting $x_1 = w_1$ and $x_1 = 1 - w_1$, or

$$\Delta(v_h(1), v_h(0))\left[\tau + (1 - \kappa)(1 - \lambda)\rho n - (1 - \kappa)(1 - \lambda)m\right] = \rho n - m.$$

Rearranging, this is only feasible if $\exists\, v^h(1) \in (0, 1]$ such that

$$\Delta(v_h^*(1), v_h^*(0)) = \frac{\rho n - m}{\tau + (1 - \kappa)(1 - \lambda)(\rho n - m)} \equiv \hat{\beta}(\theta = 1).$$

Finally, it must be that incompetent politicians prefer to select $x_1 = 1 - w_1$, which holds if

$$\rho n - m \geq \Delta(v_h^*(1), v_h^*(0))\left[\tau - \kappa(1 - \lambda)(\rho n - m)\right]$$

which is only satisfied if

$$\Delta(v_h^*(1), v_h^*(0)) \leq \frac{\rho n - m}{\tau - \kappa(1 - \lambda)(\rho n - m)} \equiv \hat{\beta}(\theta = \lambda).$$

This holds given $\hat{\beta}(\lambda) \le \hat{\beta}(1)$. ∎

Proof of Proposition 3.3. Observe

$$\overline{N}_s \equiv N^* - F_0^{-1}(\beta + F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha))$$

and

$$\frac{\partial \overline{N}_s}{\partial \alpha} = -F_0^{-1\prime}(\beta + F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha)) F_1'(N^*; M, 12(1 + \alpha)) > 0$$

given F_1 is increasing in α and F_0 is decreasing in α which gives F_0^{-1} decreasing in α. Similarly,

$$\frac{\partial \overline{N}_s}{\partial \tau} = F_0^{-1\prime}(\beta + F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha)) \frac{(\rho n - m)}{(\tau + (1 - \kappa)(1 - \lambda)(\rho n - m))^2} > 0.$$

∎

Proof of Proposition 3.4. Suppose $N_s \ge \overline{N}_s$. Let $\tilde{\kappa} = \Pr(\theta = 1 | t = 2)$. Then

$$\tilde{\kappa} = \kappa \left[1 - F_0(N^* - N_s; M, 12(1 - \alpha))(1 - \kappa - \lambda(1 - \kappa)) + (1 - \kappa)(1 - \lambda)F_1(N^*; M, 12(1 + \alpha))\right]$$

where

$$\tilde{\kappa} < \kappa \implies N_s < N^* - F_0^{-1}(F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha)) \equiv \widehat{N}_s.$$

∎

Proof of Proposition 3.5. From Proposition 3.4, we have

$$\tilde{\kappa} \ge \kappa \implies N_s \ge N^* - F_0^{-1}(F_1(N^*; M, 12(1 + \alpha)); M, 12(1 - \alpha)) \equiv \widehat{N}_s.$$

∎

C.2 Equilibrium with Weak Special Interest Group

This appendix characterizes an equilibrium if $\rho \leq m/n$.

Suppose $\rho \leq m/n$. Then, the following is always a perfect Bayesian equilibrium if $M \geq \overline{M}$: $\sigma_t^*(w_t; \theta) = w_t$, $v_h^*(1) = v_j^*(0) = 1$, $v_h^*(0) = v_j^*(1) = 0$, $\hat{\kappa}_j^*(0) = 0$ and

$$\hat{\kappa}_h^*(0) = \frac{(1 - \frac{1}{2}(1 + \alpha))\kappa}{1 - \alpha(\lambda + \kappa - \lambda\kappa) - \frac{1}{2}(1 - \alpha)} < \kappa < \hat{\kappa}_h^*(1) = \frac{\frac{1}{2}(1 + \alpha)\kappa}{\frac{1}{2}(1 - \alpha) + \alpha(\kappa + \lambda(1 - \kappa))} < \hat{\kappa}_j^*(1) < 1.$$

Proof. Suppose $\sigma_t^*(w_t; \theta) = w_t$ in an equilibrium. Then, this strategy implies expected second period utility is

$$\mathbb{E}U_2^h = \hat{\kappa}^h + (1 - \hat{\kappa}^h)\lambda$$

and

$$\mathbb{E}U_2^j = (1 - \hat{\kappa}^j)(1 - \lambda)\rho$$

and the following beliefs for the voters:

$$\hat{\kappa}_j^*(0) = 0$$

$$\hat{\kappa}_h^*(0) = \frac{(1 - \frac{1}{2}(1 + \alpha))\kappa}{1 - \alpha(\lambda + \kappa - \lambda\kappa) - \frac{1}{2}(1 - \alpha)} < \kappa$$

$$\hat{\kappa}_h^*(1) = \frac{\frac{1}{2}(1 + \alpha)\kappa}{\frac{1}{2}(1 - \alpha) + \alpha(\kappa + \lambda(1 - \kappa))} > \kappa$$

$$\hat{\kappa}_j^*(1) = \frac{\kappa}{\kappa + \lambda(1 - \kappa)} > \kappa.$$

This implies the following voting rules for voters: $v_h^*(1) = v_j^*(0) = 1$, $v_h^*(0) = v_j^*(1) = 0$.

As $\rho \leq m/n$, the majority policy maximizes social welfare and absent reelection concerns politicians will prefer to implement $x_2 = w_2$. Then, for this to be an equilibrium, both competent and incompetent incumbents must prefer $x_1 = w_1$ to $x_1 = 1 - w_1$ in the first period. This requires

$$\frac{m - \rho n}{\tau + (1 - \kappa)(1 - \lambda)(m - \rho n)} \geq F_1(N^*; M, (1 + \alpha)/2) - F_0(N^* - N_s; M, (1 - \alpha)/2)$$

or

$$M \geq \frac{N - 1}{2} + F_0^{-1}\left(F_1(N^*; M, (1 + \alpha)/2) - \frac{(m - \rho n)}{\tau + (1 - \kappa)(1 - \lambda)(m - \rho n)}; M, (1 - \alpha)/2\right) \equiv \overline{M}$$

for a competent incumbent and

$$\frac{m - \rho n}{\tau - \kappa(1 - \lambda)(m - \rho n)} \geq F_1(N^*; M, (1 + \alpha)/2) - F_0(N^* - N_s; M, (1 - \alpha)/2)$$

for an incompetent incumbent. Observe if the incentive constraint is satisfied for the competent politician, it implies the incentive constraint is satisfied for the incompetent politician. ∎

C.3 Existence of Special Interest Discipline Equilibrium with Policy Observability

This appendix proves the special interest discipline equilibrium continues to exist even if majority voters also observe policy x_1 in addition to the noisy signal of utility s_1.

Suppose $\rho > m/n$. There exists a perfect Bayesian equilibrium in which $\sigma_t^*(w_t) = 1 - w_t$.

Proof. Suppose $\sigma_t^*(w_t) = 1 - w_t$ in an equilibrium. Then, this strategy implies the following beliefs for the voters, $\hat{\kappa}^i(s_1, x_1)$:

$$\hat{\kappa}_j^*(0, x_1) = 0$$

$$\hat{\kappa}_h^*(0,0) = \frac{(1 - \frac{1}{2}(1 - \alpha))\kappa}{1 - \frac{1}{2}(1 - \alpha) - \alpha(1 - \kappa)(1 - \pi\lambda)} > \kappa$$

$$\hat{\kappa}_h^*(0,1) = \frac{(1 - \frac{1}{2}(1 - \alpha))\kappa}{1 - \frac{1}{2}(1 - \alpha) - \alpha(1 - \kappa)(1 - (1 - \pi)\lambda)} > \kappa$$

$$\hat{\kappa}_h^*(1,0) = \frac{\frac{1}{2}(1 - \alpha)\kappa}{\frac{1}{2}(1 - \alpha) + \alpha(1 - \kappa)(1 - \pi)(1 - \lambda)} < \kappa$$

$$\hat{\kappa}_h^*(1,1) = \frac{\frac{1}{2}(1 - \alpha)\kappa}{\frac{1}{2}(1 - \alpha) + \alpha(1 - \kappa)\pi(1 - \lambda)} < \kappa$$

$$\hat{\kappa}_j^*(1, x_1) = \frac{\kappa}{\kappa + \lambda(1 - \kappa)} > \kappa.$$

This implies $v_h^*(1, x_1) = 1$, $v_h^*(0, x_1) = 0$, $v_j^*(1, x_1) = 0$, and $v_j^*(0, x_1) = 1$.

Then, for this to be an equilibrium, both competent and incompetent incumbents must prefer $x_1 = 1 - w_1$ to $x_1 = w_1$ in the first period. This requires

$$\Delta(1,0) \le \frac{\rho n - m}{\tau + (1 - \kappa)(1 - \lambda)(\rho n - m)}$$

for a competent incumbent and either

$$\Delta(1,0) \ge \frac{\rho n - m}{\tau - \kappa(1 - \lambda)(\rho n - m)} \qquad \text{if } \tau < \kappa(1 - \lambda)(\rho n - m)$$

$$\Delta(1,0) \le \frac{\rho n - m}{\tau - \kappa(1 - \lambda)(\rho n - m)} \qquad \text{if } \tau > \kappa(1 - \lambda)(\rho n - m).$$

for an incompetent incumbent. Observe that this reduces to the same conditions from Proposition 3.1. ∎