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Political Appointees and Auditors of Politics: Essays on Oversight of the American Bureaucracy

A thesis presented

by

Anne Margaret Joseph

to

The Committee on Higher Degrees in
Political Economy and Government

in partial fulfillment of the requirements
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in the subject of
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Political Appointees and Auditors of Politics:
Essays on Oversight of the American Bureaucracy

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This dissertation focuses on strategic oversight of the American bureaucracy. The first essay examines whether political appointees who are called to testify more frequently in front of hostile congressional hearings have shorter tenures. Cox Proportional Hazard models on a data set of Senate-confirmed appointees who entered or left a position between 1981 and 1991 suggest that a higher rate of appropriations hearings increases appointee tenure and that a higher rate of oversight hearings decreases tenure. The essay also considers which institutional arrangements may promote longer tenure and how appointees might use government positions as stepping stones to better jobs in the future.

The second essay develops a two-period principal-agent model to analyze how auditors may build and use their reputations in selecting investigations of policy programs. At the start of the first period, the legislature hires an auditor, who may be partisan (favoring either the Democrats or the Republicans) or nonpartisan. The auditor learns, but the legislature does not,

the actual amounts of waste for a Republican and Democratic project. The auditor chooses to investigate one of the projects and reports the waste level to the legislature. At the start of the second period, the legislature decides whether to keep the original auditor or obtain a new one. The auditor then chooses between another Republican and Democratic project and reports the waste level. I extend the analysis by including a cost to firing the auditor and incorporating an election between the two periods to determine the legislature's partisan affiliation.

The third essay examines how members of Congress use the General Accounting Office to advance their own policy preferences and how the GAO chooses to investigate policy programs on its own. Using information from the GAO Documents Database for 1986-1997, I find that House committee chairpersons are more likely to request a GAO investigation when there is divided government. I also find that after the Republicans gained control of Congress in 1994, the GAO performed almost no defense investigations on its own initiative, but did not substantially increase investigations of projects that could be perceived as Democratic.

Table of Contents

To my grandparents

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Called to Testify:
Congressional Oversight and Career Patterns of Presidential Appointees

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Auditing Politics or Political Auditing

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Who Walks the Watchdog?
Bureaucratic Oversight and the General Accounting Office

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Introduction

The nation's capital is swarming with bureaucrats. The President directly oversees 14 cabinet departments; more than 50 independent agencies and government corporations sit outside the President's cabinet, from the Central Intelligence Agency to the United States Postal Service. The top bureaucratic officials who help run these government bureaucracies face a variety of principals including the executive branch, which nominates them, the legislative branch, which confirms them and may delegate work to them, and the judicial branch, which interest groups and others can use to monitor their actions.

My dissertation, which is comprised of three essays, focuses on strategic oversight of the American bureaucracy. It combines formal modeling and statistical methods to address a series of questions: How do oversight mechanisms work to punish bureaucratic agents? How do officials use their positions and the associated spotlight to advance their own careers? How does political oversight compare with monitoring economic production? What kind of reputation do auditors of policy programs seek to acquire? How do politicians engage in bureaucratic oversight to advance their objectives?

The first essay, "Called to Testify: Congressional Oversight and Career Patterns of Presidential Appointees," explores how one monitoring mechanism of one principal may control bureaucratic officials. It examines whether

Senate-confirmed political appointees who are called to testify more frequently in front of hostile congressional hearings have shorter tenures. A political appointee could face a congressional committee that wants to punish her for particular actions ex post, to constrain her in choosing a policy ex ante, or perhaps even to reward her for past or anticipated actions. Hearings before oversight committees or hearings focused on oversight likely reflect congressional attempts to punish perceived "misbehavior" by appointees. In contrast, hearings before appropriations committees may reflect the prominence of the agency or the number of different programs managed by the agency and consequently may encourage appointees to stay in government service.

To test this theory, I use a data set of Senate-confirmed political appointees who entered or left a position between October 1, 1981 and September 30, 1991. I selected top officials from all cabinet departments, top officials from the largest independent agencies, and appointees in other critical positions. I collected considerable biographical and oversight information on these appointees, including career histories and detailed classifications of the hearings at which each appointee was called to testify. Cox Proportional Hazard models, which permit inclusion of censored observations and avoid prediction of negative duration without imposing a particular functional form on the baseline hazard function, suggest that a higher rate of appropriations

hearings increases appointee tenure and that a higher rate of oversight hearings decreases tenure. These results indicate that congressional hearings, activated either by traditional police patrols or by fire alarms sounded by interest groups, are a potentially effective ex post oversight mechanism. For all but cabinet secretaries, House committees call political appointees to testify far more frequently than Senate committees. With lower opportunity costs and higher potential benefits, House members, who lack a role in the appointment process, appear to play a substantial role in bureaucratic oversight.

The essay also considers which institutional or political arrangements may promote longer (or shorter) tenure. The duration models show that Republican appointees who are confirmed under a Republican-controlled Senate stay longer than those confirmed by a Senate controlled by the Democrats. And compared to appointees who started under President Reagan's first term, appointees who entered their positions under the first President Bush have longer tenures. Finally, after analyzing how congressional oversight might constrain appointees' tenure, the essay examines how appointees might use government positions, and perhaps the associated oversight and public spotlight, as strategic stepping stones to better jobs in the future. While the statistical models do not support the theory that appointees seeking private employment after government service have shorter tenures, the

biographical information does show that many appointees enter the private sector upon leaving their government positions.

While the first essay focuses on political appointees, who are traditional targets of oversight, the second and third essays analyze political auditors, who are often perceived as traditional overseers of the bureaucracy but who turn out to be targets of monitoring as well.

The second essay, "Auditing Politics or Political Auditing?", examines theoretically the relationship between a legislature and its monitors of a bureaucracy when the players may not share identical incentives and when the monitors must choose among various opportunities for oversight. The essay develops a simple principal-agent model of bureaucratic oversight to analyze how auditors may build and use their reputations in selecting investigations of policy programs. The timing of the two-period model works as follows. At the start of the first period, the legislature hires an auditor, who may be partisan (favoring either the Democrats or the Republicans) or nonpartisan. The auditor learns, but the legislature does not, the actual amounts of waste (which can be high or low) for a Republican project (such as a fighter plane) and for a Democratic project (such as an education program for the unemployed). The auditor chooses to investigate one of the projects and produces a report for the legislature identifying the true level of waste for the chosen project. At the start of the second period, the legislature decides whether to fire or rehire the

original auditor. A new auditor may be partisan (again favoring the Democrats or the Republicans) or nonpartisan. As in the first period, the auditor learns, but the legislature does not, the actual amounts of waste (which can be high or low) for a Republican and a Democratic project. The auditor chooses one project to investigate and reports the level of waste to the legislature. The game then ends.

Within this framework, I start by considering a nonpartisan legislature. If there are symmetric priors on an auditor being a Democrat or a Republican, the legislature can use a credible firing rule that creates only socially optimal incentives. If building a reputation is cheap enough, partisan auditors will choose to investigate high waste projects affiliated with their own parties. If an auditor is more likely to be a Democrat than a Republican, the legislature has credible firing rules that may generate socially optimal as well as socially perverse incentives for an auditor who wants to profit from her reputation in the second period. Nonpartisan auditors may ignore high waste Republican projects for low waste Democratic projects in the first period to prevent being perceived as a Democrat. Democratic auditors, depending on their utility functions, may simply switch from attacking a Republican project with low waste to investigating a Democratic project with low waste in the first period or they may also switch from attacking a low waste Republican project to investigating a high waste Democratic project.

I extend the analysis by including a cost to firing the auditor, which allows players to mix strategies in equilibrium, and by incorporating an election between the two periods to determine the partisan affiliation of the legislature. With a partisan principal, the auditor may build a partisan reputation in the first period. Auditing politics, even for the nonpartisan auditor, may become political auditing. According to the model, the more evenly balanced the electoral chances of the parties, the less political auditing will occur. Though extremely simple, the model shows how an auditor and a legislature interact strategically. Because the auditor decides which policy programs to evaluate, such decisions signal revealing information to the legislature about the auditor's objectives. If the legislature can fire its agent and if the agent's reputation or job security affects her utility, the auditor will be careful about what projects she chooses to oversee.

The third essay, "Who Walks the Watchdog? Bureaucratic Oversight and the General Accounting Office," moves from a theory of auditing politics to its actual practice by the General Accounting Office (GAO), the primary watchdog agency that reports to Congress. Created in 1921 and strengthened after Watergate, the GAO monitors the bureaucracy on its own initiative, by legislative mandate, and at the request of congressional committees and individual members of Congress. In its beginning decades, the GAO mostly engaged in self-initiated investigations. Today, almost all of its work is

completed pursuant to congressional requests or statutory requirements. The GAO has provoked considerable controversy. For example, under the elder President Bush's tenure, critics perceived the GAO as supporting a Canadian-style health care system and increased taxes to reduce the deficit. After the Republicans gained control of Congress in the 1994 elections, the GAO faced a 25 percent budget cut that pared its personnel roster from approximately 5000 to 3500 employees by 1996. The GAO, whether seen as a neutral watchdog for waste or as a partisan player in bureaucratic politics, operates in a highly charged environment. This essay examines how members of Congress use the GAO to advance their own policy preferences and how the GAO chooses to investigate policy programs on its own.

From a simple model supplemented by interviews of GAO officials and the theoretical work developed in the second essay, I generate several testable propositions. First, political parties in Congress may try to undermine programs supported by the executive branch. In periods of divided government, members and committee chairs should request more GAO investigations. In periods of united government, members of the minority party should request more GAO studies. Second, members of Congress may use the GAO to increase their chances of being reelected. In particular, Senators facing reelection sooner should request more studies than Senators facing reelection in a later cycle. Third, if the GAO is concerned about how it

is perceived by its sponsors in Congress, its self-initiated work should often be targeted to please congressional majorities no matter what policy preferences are held by the GAO itself. Fourth, if the GAO is worried about its reputation, it should make fewer recommendations when its work is not congressionally requested.

I test these propositions using information from the GAO Documents Database, which catalogues details on all published GAO reports and testimony to Congress, for 1986-1997. I find some support for the institutional theory of how Congress uses the GAO. House committee chairpersons are more likely to request a GAO investigation when there is divided government. A change from united to divided government corresponds to a 5.68 percent increase in the probability that a House committee chairperson will join a request. House committee ranking minority members are less likely to turn to the GAO when there is divided government. A shift from united to divided government leads to a 2.16 percent decrease in the probability that a House committee ranking minority member will sign onto a request. It also appears that Senators facing the voters in the next election request more studies than other Senators. I find some support for theories about the GAO's self-initiated investigations. I track the GAO's self-initiated work in national defense (a Republican area) and education (a Democratic area). After the Republicans gained control of Congress in the 1994 elections, the GAO performed almost

no defense investigations on its own initiative (it had devoted a considerable percentage of its work to defense studies previously), but the GAO did not substantially increase its education-related work. The GAO also seems to issue recommendations carefully. It makes more recommendations to Congress when a study is requested but makes more recommendations to agencies when a study is self-initiated, perhaps anticipating that Congress will call for agency changes when an investigation is requested.

Any study of the American bureaucracy must consider principal-agent problems. The first essay, on political appointees, analyzes a traditional example. The second and third essays examine a non-traditional example, showing that the interaction between a legislature and its auditor of bureaucratic programs is a principal-agent problem as well. Members of Congress want agency action and bureaucratic monitoring that align with their objectives. These essays suggest that agency officials and agency monitors either tend to deliver or face real consequences. But the essays also suggest that agency officials and agency monitors can use their positions to advance personal objectives. Overseers and targets of oversight tangle in some interesting and strategic ways. I hope to have provided insight into some of these interactions.

Called to Testify:
Congressional Oversight and Career Patterns of Presidential Appointees

On Wednesday, June 21, 2000, Energy Secretary Bill Richardson confronted upset members of Congress. Members of the Senate Armed Services Committee grilled Richardson about the disappearance from the Los Alamos National Laboratory of two computer hard drives storing secret nuclear weapons data. The Committee's Chairman, John W. Warner (R-VA), chastised the Secretary, "[W]e are holding you accountable. These incidents happened on your watch."[1] Senator Richard C. Shelby (R-AL), Chairman of the Intelligence Committee, called on Richardson to resign.[2] The attacks on President Clinton's appointee were not restricted to Republicans. Senator Robert C. Byrd (D-WV) told Richardson that he had "shown a contempt of Congress that borders on arrogance" after Richardson failed to appear at an intelligence committee hearing the previous week.[3] Byrd also warned Richardson that he "would never again receive the support of the United States for any office to which you might be appointed."[4] Despite the uproar,

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[1] Schrader (2000).

[2] Id.

[3] Pincus (2000).

[4] Boyer (2000).

Richardson remained at the Energy Department until President Clinton left office.

The nation's capital is crawling with bureaucrats. The President directly oversees fourteen executive departments; outside the President's direct control sit more than 50 independent agencies and government corporations, from the Federal Election Commission to the National Railroad Passenger Corporation (more commonly known as Amtrak).[5] Approximately 640 full- and part-time Senate-confirmed presidential appointees, along with other executive appointees and career civil servants, help run the government bureaucracies—comprising a federal workforce of over two million employees.[6]

Although Congress establishes and finances executive and independent agencies and although the President appoints (often with Senate confirmation) leaders to run these institutions, agency leaders and bureaucrats have immense flexibility in implementing policies. Consequently, there are more than 80,000 lobbyists pushing to implement their associations' objectives. It is estimated that "lobbying" ranks third in industry employment in the nation's capital, after

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[5] Davidson and Oleszek (2000, 312-13).

[6] Id. at 317-18. Military personnel are not included in this workforce total. One can track the current nomination and confirmation process under President Bush at http://www.apppointee.brookings.org.

the government and tourism.[7] All of these principals tug at political appointees, often in conflicting directions.

I explore how one mechanism of one principal may function to oversee political appointees in the bureaucracy. Do Senate-confirmed appointees who are called to testify more frequently in front of hostile congressional committees have shorter tenures? Committee chairpersons typically control the decision to call a hearing, but once one is called both majority and minority members can grill witnesses. An appointee could face a congressional committee that wants to punish her for particular actions ex post, to constrain her in choosing a policy ex ante, or perhaps even to reward her for past or anticipated activities. Politicians use hearings to extract some sort of benefit for themselves; benefits sometimes derive from building up an appointee, other times from tearing one down. Members of a committee may play different roles at the same hearing.[8] Most research suggests that appointees and members of Congress view hearings as a way to catch "mistakes," or at least cause some inconvenience.[9] I also consider which institutional arrangements

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[7] Id. at 335.

[8] DelSesto (1980).

[9] Fenno (1959, 205-206); Kaufman (1981, 48, 127, 166); Macmahon (1965, 191, 195); Michaels (1997, 260); NAPA (1985, 4 n.3); NAPA (1983, 67-68). Former Secretary of the Navy under President Clinton, Richard Danzig, sees congressional hearings as away for members of Congress to "beat up" on

and executive positions may promote longer (or shorter) tenure. Finally, I examine how appointees might use government positions—and perhaps the associated oversight—as strategic stepping stones to better jobs in the future.

This essay proceeds as follows. In Part I, I briefly summarize the relevant literature on appointee tenure and congressional oversight. In Part II, I propose several hypotheses on appointee tenure. I describe my data on congressional oversight and career paths for a set of high level Reagan and Bush[10] appointees and the methods used to analyze the data in Part III. In Part IV, I present some stylistic and statistical results that indicate that congressional hearings, activated either by traditional police patrols or by fire alarms sounded by interest groups, are a potentially effective ex post oversight mechanism. Cox Proportional Hazard models suggest that a higher rate of appropriations hearings increases appointee tenure and that a higher rate of oversight hearings decreases tenure. Institutionally, much of this oversight occurs by the House

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political appointees and perceived that members of Congress were out to attack him during his government service. Discussion at Meeting of Yale Law School Association of Washington, D.C., Jan. 9, 2001. But Jones et al. (1993), after examining hearings on four issues (pesticides, nuclear power, tobacco, and drug abuse), conclude that most hearings are favorable to the interests involved. They concentrate primarily on interest group representatives as witnesses. Although government officials are included as part of larger interest groups, they are not analyzed separately.

[10] All references to President Bush refer to President Herbert Walker Bush unless specifically noted otherwise.

of Representatives. For all but cabinet secretaries, House committees call political appointees to testify far more frequently than Senate committees. Furthermore, the duration models show that Republican appointees who are confirmed under a Republican-controlled Senate stay longer than those confirmed by a Senate controlled by the Democrats. And compared to appointees who started under President Reagan's first term, appointees who entered their positions under President Bush have longer tenures. While the statistical models do not support the theory that appointees seeking private employment after government service have shorter tenures, the biographical information does show that many appointees enter the private sector upon leaving their government positions. Part V concludes.

I. Literature Review

For decades, public administration scholars have lamented the short tenure of Senate-confirmed presidential appointees.[11] One staff member under President Eisenhower quipped that appointees stay for "a social season and a

[11] Brauer (1987); Heclo (1988, 1977); Ingraham (1987); Stanley et al. (1967, 54). Heclo (1988, 48-49) also considers some of the benefits of short tenure—suggesting that rapid turnover may help the President maintain control, may encourage talented individuals to enter public service for small periods, may encourage high productivity during the brief stints of service, and may generate better ideas. Scholars have also remarked on the increasing length of time required to fill appointed positions. Mackenzie (2001, B5).

half and then leave."[12] A comprehensive Brookings Institution study in the late 1960s reported that Roosevelt appointees had a median tenure of 38 months, Truman appointees had a median tenure of 22 months, Eisenhower appointees had a median tenure of 28 months, and Kennedy appointees (who had left government service by April 30, 1965) had a median tenure of 23 months.[13] A later study by the National Academy of Public Administration (NAPA) found that President Johnson's appointees served an average of 2.8 years. By the end of President Reagan's first term, appointees were serving an average of only two years.[14] Ethical regulations, the complexity of mandatory financial disclosure forms, low salaries relative to the private sector, and presidential personnel offices came under attack by administration pundits who wanted to create incentives for appointees to stay longer in government posts.[15]

To analyze such trends, there is considerable data on certain aspects of twentieth century appointees. The Brookings Institution study collected extensive information not only on tenure but also on the personal background and career paths of appointees nominated under Roosevelt, Truman,

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[12] Ingraham (1987, 428).

[13] Stanley et al. (1967, 62).

[14] Brauer (1987, 175).

[15] For example, NAPA (1985) called for simpler disclosure forms, improved orientation and information for new appointees, and higher salaries.

Eisenhower, and Kennedy (analyzed by Stanley et al. (1967)). The NAPA study gathered biographical data on all and survey data on some of the presidential appointees requiring Senate confirmation between 1964 and 1984 (analyzed by Joyce (1990), Light (1991), Mackenzie (1987), Tomlinson and Anderson (1999), and others). The General Accounting Office (GAO) compiled tenure data for most Senate-confirmed presidential appointees under Reagan and Bush and surveyed a subset of the Bush appointees (analyzed by Michaels (1997)). Both the NAPA and GAO surveys asked appointees about their background, perceived relations with other governmental actors, pre- and post-appointment employment, perceived benefits and costs of public service, and other items.

Presidency scholars have used this survey data to focus primarily on internal stories of executive branch staffing.[16] Stanley et al. (1967) summarize a tremendous amount of tenure data on multiple sets of appointees but they do not provide a systematic study of how personal and institutional factors impact tenure.[17] More recent scholars have emphasized the "personality" of particular

[16] These analyses are restricted to appointees who completed the relevant detailed background and attitude surveys. I was able to collect biographical and employment data on an entire set of top-level appointees.

[17] Although Stanley et al. (1967, 82) list the following causal factors for short tenure: "crushing workload, administrative frustrations, difficulties with the news media or the legislative branch, family problems", they do not perform any statistical analysis of such factors.

administrations and its effect on appointees. Michaels (1997) contrasts the temperaments of the Reagan and Bush administrations and concludes that President Reagan's efforts to pick loyal appointees contributed to attacks by appointees on the agencies they headed.[18] She suggests, without rigorous analysis, that appointees tied to the most troubled government programs served the shortest amount of time.[19] Some research has applied more rigorous techniques. Joyce (1990) tests to what extent salary differences, age, trust in the career bureaucracy, time and stress demands, past experience, and party of the appointing President influence appointee tenure. From an ordinary least squares regression,[20] he finds that "poor relations with the career bureaucracy and the lure of greater private sectors salaries" negatively impact tenure.[21] Tomlinson and Anderson (1999) use hazard models to analyze the same NAPA data for the effect of wage differentials, family stress, age, time of appointment within an administration, and other elements on the likelihood of presidential appointees leaving office at a given time. They find that a pay cut from

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[18] Michaels (1997, 4). See also NAPA (1983, 39).

[19] This conclusion derives from particular observations and not from any empirical analysis. Michaels (1997, 206-08).

[20] Multiple regression techniques presume the dependent variable is distributed normally. Because tenure takes only positive values, duration or hazard models should be used instead.

[21] Joyce (1990, 127).

previous employment to government service, longer work schedules, and higher levels of stress have positive effects on the hazard rate, and consequently a negative effect on appointee tenure.[22]

Examining appointees in isolation from interest groups and the non-executive branches of government is, however, problematic. Early work on appointees recognized that officials could be studied at many levels—as a separate institution, as connected to the President, and as connected to the "total governmental process."[23] Political appointees serve the President who nominates them as well as members of Congress who delegate work to the federal agencies and departments they run, and they operate under the potentially piercing oversight by interest groups and the courts. In terms of microeconomics, appointees essentially function as agents trying to please multiple principals.

There is a long literature addressing oversight of the bureaucracy. Historically, scholars studied the internal organization of the bureaucracy, analyzing mechanisms to make it run more efficiently. In 1969, Allison's seminal article on the Cuban missile crisis shifted attention from these internal concerns of administrative efficiency to concerns of competing power relations

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[22] Tomlinson and Anderson (1999, 17).

[23] Fenno (1959, 6).

between bureaucrats and other actors.[24] Early work on "iron triangles" emphasizes the role of small networks of administrative agencies, congressional committees, and interest groups in determining particular policies.[25] Although both firms and agencies participate in these sub-governments, the theory stresses the ability of members of Congress to influence policy decisions important to their districts, and subsequently, to their chances at reelection.[26] Iron triangles were in some sense precursors to principal-agent models of bureaucratic oversight, where Congress and the President delegate tasks to and oversee bureaucratic agents.

A debate erupted (and still persists) over the strength of congressional oversight of the bureaucracy. Some scholars argue that Congress is the dominant overseer,[27] relying on statutory controls, the appropriations process, hearings, investigations, and other tools to keep bureaucrats in line.[28] Others suggest that the President, who appoints all—and can fire at whim most—top

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[24] Allison (1969).

[25] Cater (1964); Fiorina (1977); Freeman (1965).

[26] Fiorina (1977, 67).

[27] Bendor et al. (1987b); Calvert et al. (1989); Weingast, (1984); Weingast and Moran (1983).

[28] Arnold (1987) and Davidson and Oleszek (2000, 311-33) provide a short summary of these techniques.

officials, wields considerable power.[29] One prominent theory in the political science literature on bureaucratic oversight emphasizes the types of monitoring of agency actions, fire alarms and police patrols.[30] McCubbins and Schwartz (1984), who coined the terms, write, "Instead of sniffing for fires, Congress places fire-alarm boxes on street corners, builds neighborhood fire houses, and sometimes dispatches its own hook-and-ladder in response to an alarm."[31] They argue that most bureaucratic oversight of agency action occurs through threats by interest groups to sound a fire alarm to Congress because such oversight is cheaper than direct police patrolling such as hearings and investigations by congressional members.[32] Focusing on congressional committee hearings, Aberbach (1990) finds, however, that police patrols often occur. Hearings, though centrally implemented, could be called because of alarms sounded by outside constituents. Aberbach argues that congressional oversight became more attractive in the 1970s and 1980s because of increasing skepticism of government after Watergate, increasing rivalry between Congress and the executive branch, growing government deficits, and a more

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[29] Moe (1991, 1987, 1984); Nathan (1983); Waterman (1989).

[30] McCubbins and Schwartz (1984).

[31] Id. at 166.

[32] Id. at 166-69.

decentralized structure of congressional decision making.[33] Other congressional researchers have analyzed hearings as a measure of institutional boundaries. Baumgartner et al. (2000) examine all congressional hearings between 1947 and 1994 and find a decline in jurisdictional clarity for most issues over time. They do not, however, attempt to link their analysis of congressional hearings to any sort of agency outcome.[34]

Though much of the recent empirical research on oversight examines ex post mechanisms, some work analyzes ex ante tools such as the confirmation process for appointees. McCarty and Razaghian (1999) study the confirmation process for more than 3500 executive branch nominations from 1885 to 1996 and conclude that confirmations take longer when there is divided government and when the Senate is "ideologically polarized." Snyder and Weingast (2000) analyze how institutional arrangements constrain appointments to the NLRB and subsequent agency decisions. More generally, McCubbins et al. (1987, 1989) and Ferejohn and Shipan (1990) have emphasized ex ante structural and procedural controls over agency actions.[35] As Bawn (1997), Huber et al. (2001) and others have argued, these ex ante and ex post mechanisms may function as

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[33] Aberbach (1990, 191-93). See also Ogul and Rockman (1990).

[34] See also Baumgartner and Jones (1993).

[35] Spence (1999) tests empirically how such mechanisms operate in the context of FERC decisions.

substitutes. But to the extent that some overseers are better able to use one form of oversight than another, we will often see a panoply of oversight techniques for monitoring political appointees.

I am interested in analyzing the strategic interaction between Congress and the bureaucracy to see how congressional oversight might constrain appointees' government tenure and how appointees might use Congress and the public spotlight to advance their careers within or outside the government.

II. Hypotheses

Political appointees do not remain at their positions for long. Most move to another, potentially more attractive, appointment in the public or private sector, while some move into retirement. To explore the interaction between Congress and the bureaucracy, I consider how various factors—such as oversight mechanisms, institutional arrangements, and internal aspects of the bureaucracy and of bureaucrats—may influence the tenure of appointed officials.

A. Oversight Mechanisms

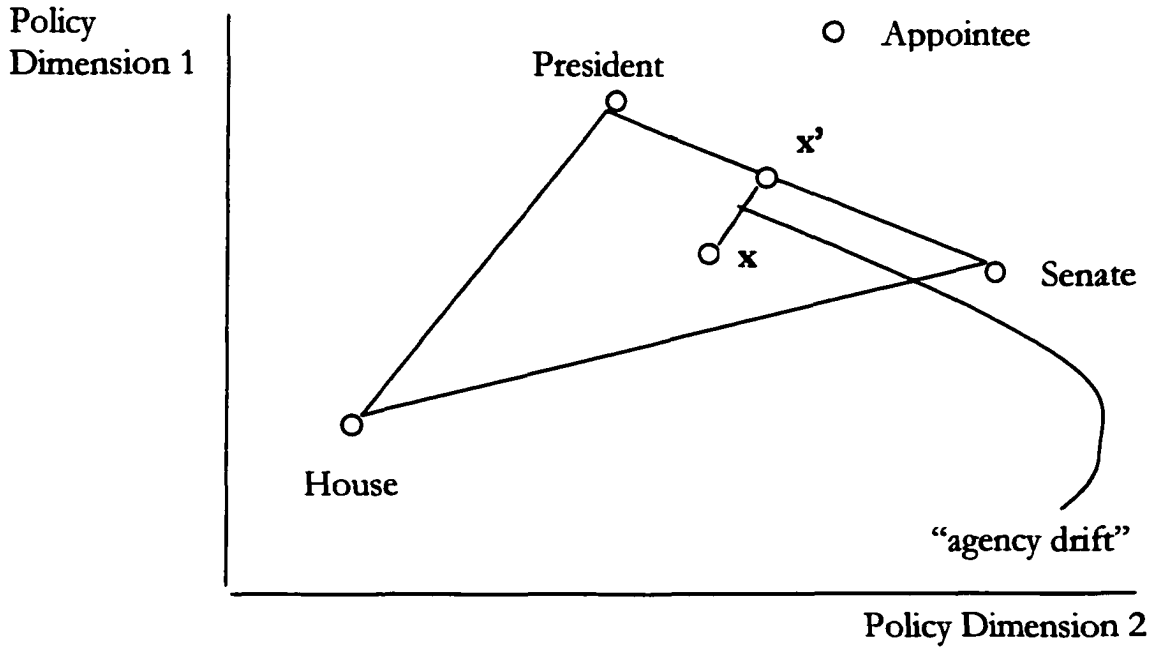
Presidential appointees are agents of both Congress and the President. Because these principals rarely share identical preferences, it is not clear what control either has over the bureaucracy and the appointees who run it. McCubbins et al. (1989) examine a two-dimensional policy space, in which the

President, House, Senate, and an Appointee have different ideal points.[36] The President and Congress establish a policy, which is to be carried out by the Appointee, inside the pareto set determined by their ideal points. Figure 1.1 illustrates this framework. Assume after bargaining among themselves, the President and Congress choose policy x. According to McCubbins et al. (1989), the Appointee will enact x' because it is the closest policy to the Appointee's ideal point that is still within the pareto set of the political players. In this framework, ex post punishments must be unanimously imposed because of constitutional requirements—barring a presidential veto and necessary congressional override—that any new legislation pass both the House of Representatives and the Senate (bicameralism) and be signed by the President (presentment).[37]

[36] The President and Senate choose the Appointee. Figure 1.1 shows the Appointee with an ideal point outside the pareto set of the President and Senate. Such a result could be due to imperfect information about the Appointee's ideal point when she is chosen.

[37] U.S. Constitution Art. I, Sec. 7.

Figure 1.1



The Appointee's principals are not, however, constrained to passing new legislation upon seeing x'. Congressional hearings may function as an effective ex post one-player veto. Ogul (1976) and others have argued that most oversight occurs within the committee structure. The House may utilize hearings more than the Senate because the House does not have a role in the nomination and confirmation process for presidential appointees, because there are more members who want to look active to their constituents,[38] or because its greater size means that the opportunity costs for holding any one hearing are

[38] Mayhew (1974); Shepsle (1978, 256).

lower.[39] Due to these differences between the legislative chambers, I expect to see two trends. First, the House should conduct more hearings than the Senate; second, because of the first trend, senators will select the highest-level officials to testify when they do grill appointees.

Hypothesis One:

The House conducts more hearings than the Senate. The difference is less pronounced for top officials such as cabinet secretaries and is more pronounced for lower level appointees such as assistant secretaries and heads of independent and other executive agencies.

Executive officials may be called to testify before a congressional committee for a variety of reasons—because they "misbehaved" (or did not follow congressional preferences), because they have particular expertise or advocate certain views helpful to members of Congress, because they head prominent agencies, or because they seek out congressional and media attention.[40] Hearings before oversight committees or hearings focused on oversight likely reflect congressional attempts to punish perceived "misbehavior" by presidential appointees. In contrast, hearings before

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[39] Aberbach (1990, 51). Members of Congress have smaller staffs than the agencies they oversee and must pick the battles they want to wage. Davidson and Oleszek (1977, 96-97) outline both the benefits and costs to members for conducting hearings.

[40] From surveys of congressional staff and members, Aberbach (1990, 107-10) found that hearing agendas are primarily comprised of scandals, crises, disagreements with agency policies, reauthorization issues, interest group complaints, or other opportunities for publicity.

appropriations committees may reflect the prominence of the agency or the number of different programs managed by the agency.[41] In any case, testifying appointees must devote time and resources to preparing and appearing before Congress, potentially extracting a net cost from top-level bureaucrats.

Do appointed officials who have been "caught" abusing legislative trust retire at faster rates? Overseers of the bureaucracy cannot easily reduce the salary of bureaucratic agents, but principals can indicate their displeasure through hearings, encouraging such officials to think about finding a job outside the Beltway, or at least outside of a particular government agency.[42] Wood (1988) and Wood and Waterman (1991) provide some evidence that hostile congressional hearings led to the firing or resignation of a number of EPA officials in Reagan's first term. Several other Reagan appointees retired after being accused of unethical or illegal actions.[43] Brauer (1987) finds that 36.8 percent of appointees who answered the NAPA survey listed dealing successfully with Congress as one of the most difficult aspects of the job and

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[41] Of course, members of Congress can use the appropriations process to stop particular projects being contemplated by agency officials or the President as well as to prevent shirking. On stopping projects, see Fletcher (2000); Skrzycki (2000). On preventing shirking, see Banks (1989); Bendor et al. (1987a).

[42] Although committee chairmen are the only members with authority to call a hearing, minority members can lobby the opposing party to call hearings.

[43] Brinkley (1984).

that 35.8 percent said that congressional opposition to department or agency efforts was one of the most frustrating aspects.[44] To the extent that hearings are effective punishment tools, I would expect that officials who testify frequently in oversight hearings to have shorter tenures. It may be, however, that such congressional attention energizes presidential appointees, who know they are not following congressional objectives, and motivates them to stay longer.[45] To the extent that hearings cover an agency's appropriations, I would expect that officials who testify frequently in appropriations hearings to have longer tenures.

Hypothesis Two:

To the extent that oversight hearings are effective punishment tools, as the rate of oversight hearings increases, the tenure of a presidential appointee declines. To the extent that appropriations hearings indicate active agency projects, as the rate of appropriations hearings increases, the tenure of a presidential appointee increases.

It is not immediately clear how appointee tenure and hearings interact. It could be that a congressional committee calls appointees to testify when

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[44] Brauer (1987, 185).

[45] The Reagan transition team invested considerable time in screening appointees, "emphasizing loyalty and ideology above all other attributes." Wood and Waterman (1991, 804). One Congressman, who served during Reagan's administration, believes that appointees feel vindicated when grilled by the opposing party but face considerable pressure when interrogated by their own party. Interview with Mickey Edwards, former Representative from Oklahoma (May 17, 2000).

appointees have not acted according to wishes of congressional committee members. Such grilling could then take a toll on appointees, leading to shorter tenures. But it could also be that some appointees begin government service knowing they want to stay only for a short period. They then act in such a manner that causes them to testify frequently in congressional hearings because they know they are not planning to stay much longer. Although I find the first story more plausible, I try to be careful about any causal stories I tell. Ideally one would want to compare appointees who do not "misbehave" and appointees who do to be able to determine the marginal effect from punishment by oversight hearings on tenure.[46]

B. Institutional Arrangements

Top executive officials face a variety of principals: the executive branch which nominated them, the legislative branch which confirmed them and which may delegate work to them, and the judicial branch which interest groups and others can use to monitor agents' actions. When power is split between political parties, appointees will typically confront more conflict. For instance, officials may find it harder to enact particular programs under divided government and may be more likely to retire. To the extent that divided government curtails agency action, there could be less congressional oversight

[46] Suzanne Cooper suggested this comparison.

under divided government, but if members of Congress use hearings as a tool to gain constituent support, hearings will still occur during divided government and will likely be more hostile. Moreover, if an official begins under united government, the transition to divided government in a midterm congressional election may encourage an appointee to retire. It is possible that the President would appoint different types of people depending on the institutional arrangements, such as a combative and strong person during divided government, which would work against the theory described above.

Hypothesis Three:

When the same party does not control the executive and legislative branches, a presidential appointee retires faster.

Partisan dynamics may also impact presidential appointees differently, based on the closeness of the appointee to the President. Cabinet department officials may face more pressure than independent agency officials do because they have two strong principals, the President and Congress. On the other hand, cabinet department officials may feel more protection from congressional oversight than independent officials because of stronger support from the President. Presumably higher-level officials warrant more protection than lower level appointees.[47] The Brookings Institution study finds that

[47] Fenno (1959, 213) suggests that because the President has limited resources for battles "to save a Cabinet member," he will only suffer costs for an appointee if the official "is of sufficient value to him." There could be

cabinet secretaries have longer tenures than all other positions except for commissioners.[48] Fisher (1987) also makes a similar finding using data on a more recent set of appointees. A distinction between cabinet and independent agency officials may be too blunt; after all, there is considerable variation among cabinet departments or independent agencies. The Brookings Institution study determines that appointees at "emergency" agencies have shorter tenures and that appointees at agencies in "stable patterns of coexistence with their constituents" (for example, Interior, Agriculture, and the Treasury) have longer tenures.[49] Though they find that most issue areas have growing committee jurisdictions over time, Baumgartner et al. (2000) show how some issue areas such as education, agriculture and science have had relatively coherent committee jurisdictions while other areas such as health, energy, and the environment have much less clear committee jurisdictions. Controlling for such variation among issues, I expect lower level cabinet officials to have shorter tenures and cabinet secretaries to have longer tenures than officials at independent agencies.

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competing effects. The President may only have to fight for appointees in more important jobs but these appointees may likely be the only ones who need the President's support since they are the most visible.

[48] Stanley et al. (1967, 57-60).

[49] Id. at 63-67.

Hypothesis Four:

A presidential appointee in a cabinet department who is not a cabinet secretary retires faster than an appointee at an independent agency does. A cabinet secretary retires slower than an appointee at an independent agency does.

C. Career Paths of Bureaucrats and Internal Life of Agencies

Appointees may use government service for their own career objectives in a variety of ways.[50] One government position might lead to a better, or "preferred," government position.[51] Or a government position may lead to a more enticing and better paying job in the private sector.[52] Or the position may

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[50] There is a considerable literature in economics that examines how workers respond to incentives created by career concerns. In the bureaucracy context, see Dewatripont et al. (1999). For broader examples, see Chevalier and Ellison (1999); Fama (1980); Holmstrom (1982); Lazear and Rosen (1981).

[51] Ingraham (1987, 429). Ban and Ingraham (1990) find little interagency movement for lower level Reagan appointees. But other work has documented the "burrowing" of political appointees into career appointments. GAO (2000).

[52] Fisher (1987, 28-29); Kurtzman (2001); NAPA (1983, 92); Wayne (2000). Eckert (1981) traces how commissioners at regulatory agencies use government service as a way to get into private sector jobs related to the regulated field. He suggests that private jobs are either a "reward for votes on the bench that were favorable to the industry or a particular firm" or a way to capture the human capital about the regulatory process gained from government work. Eckert (1981, 120). Heclo (1988, 50, 53) posits that government positions are more helpful for career advancement for lower level appointees such as assistant secretaries. But he also quotes appointees who claimed that actions taken as a government official could hinder private employment afterward. Though career paths may show appointees entering the private sector after government service, such paths do not show that these individuals would not have entered the private sector without government service. Ethics rules restrict certain

merely be a brief respite before the appointee returns to her previous job.[53] In a recent poll by the Brookings Institution's Presidential Appointee Initiative, 54 percent of respondents stated that "career advancement is the leading motivator" for appointees.[54]

Appointees with prior government experience are likely to be more familiar with agency politics, less likely to be rattled by congressional committees, and more likely to consider future public service than officials with no public experience. Michaels (1997) indicates that there were significant differences between Reagan and Bush appointees, with Reagan's appointees generally lacking previous government experience because of what Michaels calls "the Reagan ideological litmus test."[55] Appointees coming from the

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activities of former appointees but appointees can still use their government connections in a myriad of other ways (such as providing advice on government relations to businesses), even if they cannot call on their former agency directly for a set period of time. Wayne (2001).

[53] In the 1967 Brookings Institution study, of those appointees who went back to private jobs, the greatest percentage (21%) returned to the same organizations where they had worked prior to their government stints. Stanley et al. (1967, 73-74). Because only a handful of appointees in my data had this career path (i.e., returned to their previous job), I did not include a variable to measure this type of career path in my statistical analyses.

[54] Kamen (2001).

[55] Michaels (1997, 41). From interviews with appointed Senior Executive Service members under Reagan, Ban and Ingraham (1990) conclude that at most agencies lower level appointees conformed to the "counter-staffing model," where appointees are more ideological and loyal to an administration and are consequently less likely to have prior federal experience. To help

private sector may have a higher opportunity cost or may react to public service differently than appointees coming from the public sector. Stanley et al. (1967) suggest that tenure of Commerce Department and State Department appointees nominated from Roosevelt to Johnson was shorter because of greater career pressures—to return to the private sector for the former and to continue job rotations for foreign service officers for the latter.[56] Thus, both intended future employment and prior employment likely affect official tenure.

To the extent that younger appointees leave government service earlier (because a presidential appointment is considered a stepping stone to a better job)[57] or to the extent that older appointees with grown or no children can make more sacrifices,[58] it would be important to control for age.

Hypothesis Five:

A presidential appointee who seeks private sector employment after government service retires faster.[59]

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ensure such loyalty, Aberbach and Rockman (1995) state that the Reagan administration maintained more centralized control over subcabinet appointments than the Bush administration, which often gave more discretion to cabinet secretaries to fill lower level positions. Consequently, I would expect Bush appointees to serve longer than Reagan appointees.

[56] Stanley et al. (1967, 63).

[57] Brauer (1987, 177) finds that younger appointees have shorter tenures.

[58] Heclo (1988, 52).

[59] I am aware that there are endogeneity problems in the testing of this hypothesis.

Hypothesis Six:

A presidential appointee whose previous job was in government stays longer than an appointee whose previous job was in the private sector.

Hypothesis Seven:

Younger presidential appointees have shorter tenures.

The timing of an individual's appointment within a presidential administration may also reflect information about an appointee's career track. Light (1991) and Tomlinson and Anderson (1999) posit that initial appointees are more likely to be partisan "hacks," nominated in return for work done on the campaign whereas later appointees are typically more experienced. This theory suggests that individuals appointed later in a President's term may have longer tenures because they are more effective. Tomlinson and Anderson (1999) find no evidence to support this hypothesis. Perhaps individuals appointed later in a President's term retire faster to capture any remaining rewards in the private sector from having connections to the current administration.

Hypothesis Eight:

An individual appointed later in a President's tenure stays longer.

The internal organization and resources of a bureaucracy may also influence the tenure of political appointees. On one hand, agencies with larger

budgets may be exciting places to work, providing more programs and greater opportunities for appointees to enact particular policies. On the other hand, appointees at such agencies may have better career opportunities outside of the particular agency, in the public or more likely in the private sector. Likewise, individuals serving in top positions (for example, cabinet secretaries or heads of administrative agencies) may have more interesting work but may also have more appealing outside options than lower level appointees.[60] Because of these conflicting incentives, I expect no particular effect of budgets or position (separate from an institutional arrangement story) on tenure but do believe they are important controls to include in a statistical analysis.

III. Methods and Data

A. Methods

I apply duration or hazard analysis to test my hypotheses simultaneously.[61] Duration or hazard analysis models the hazard rate, the instantaneous rate at which an individual's tenure terminates after time t given

[60] There are also potential competing effects with oversight: The most exciting agencies may also face the most pressure and scrutiny.

[61] Good statistical sources on hazard analysis include Box-Steffensmeier and Jones (1997) and Greene (1993). For examples in economics, see Heckman and Stinger (1984); Kiefer (1988). For examples in political science, see Alt and King (1994); Berry and Berry (1990); Binder and Maltzman (2002); Box-Steffensmeier (1996); Box-Steffensmeier et al. (1997); Diermeier and Stevenson (1999); Katz and Sala (1996); Shipan and Shannon (2001); Tomlinson and Anderson (1999).

that the individual has served until t. If conditions, which are called covariates, exist that increase this rate of termination, tenure is expected to be shorter than when such conditions are absent. Hazard analysis differs from standard ordinary least squares analysis in that it treats the dependent variable—tenure (in days) in an executive position—as a temporal variable, which permits the inclusion of censored observations and avoids the prediction of negative duration.[62]

I use the Cox Proportional Hazard (CPH) model in this essay. Unlike the exponential, lognormal, log-logisitic, or Weibull hazard models, the CPH model does not impose a particular functional form on the baseline hazard function. I reject the exponential model because it seems unlikely that the hazard function is constant over an appointee's tenure. I also reject the Weibull model because it is not clear that the function is increasing over time (which would imply some sort of exhaustion story: the longer an appointee serves, the more likely she is to retire) or decreasing over time (which would imply some sort of experience story: the longer an appointee serves, the more she wants to stay to finish projects).[63] I use the CPH model because it does not

[62] Greene (1993); Tomlinson and Anderson (1999).

[63] Greene (1993, 718-20).

impose a strict functional form.[64] The model does, however, assume that the proportionality of hazards across cases does not vary over time.[65]

The hazard rate for case *i* with the CPH model is:

$$h_i(t) = e^{\beta' x_i} h_0(t)$$

where $\beta' x_i$ is the matrix of coefficients and covariates for the *i*th case and $h_0(t)$ is the baseline hazard rate. The hazard rate is roughly the rate at which executive officials leave their appointed position at time *t* given that they have remained until time *t*. Mathematically, the hazard rate is:

$$h(t) = \frac{f(t)}{S(t)}$$

where $f(t)$ is the probability density function that an individual will leave her position in the next increment of time (between *t* and $t+\Delta$) and $S(t)$ is the survival function, which is the fraction of appointees still in their positions at

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[64] The CPH assumption implies that only the order of durations gives information about the coefficients of the covariates. Kiefer (1988, 668).

[65] In other words, hazard functions of any two individuals with different covariate values differ only by a proportional factor. Box-Steffensmeier and Zorn (1998, 7). This can be tested by plotting rescaled Schoenfeld residuals against survival times and testing them for constancy. Diermeier and Stevenson (1999, 1061 n.13). Box-Steffensmeier and Zorn (2001, 1998) suggest other tests as well.

time t (1-$F(t)$ where $F(t)$ is the cumulative density function of $f(t)$).[66] Due to the model's partial likelihood estimation, the baseline hazard function is estimated nonparametrically.[67] Positive coefficients predict shorter duration (positive effects on the hazard rate) and negative coefficients predict longer duration (negative effects on the hazard rate).

B. Data[68]

For a ten-year period from October 1, 1981 through September 30, 1991, the GAO collected data on 567 executive positions filled by persons appointed by the President and confirmed by the Senate, which included 409 positions where the individual serves indefinitely at the pleasure of the President and 158 positions with a fixed term of office. For each position, the GAO data contains the names of all individuals who served within the ten-year period and their respective starting and ending dates.[69]

From the indefinite term positions, I selected top officials from all cabinet departments (Secretaries, general Deputy Secretaries, and general Under Secretaries) and the largest independent agencies (Administrators and Deputy

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[66] This discussion follows Tomlinson and Anderson (1999) and Greene (1993).

[67] Box-Steffensmeier and Jones (1997, 1433).

[68] The data is described completely in Appendix 1.A. In this section, I briefly summarize the data used in the subsequent analysis.

[69] GAO (1994). Matt Dickinson graciously shared this data.

Administrators). I also included all variable term positions listed in the 2000 Prune Book: How to Succeed in Washington's Top Jobs[70] that existed within the time period of the GAO data. Using this selection process, there are 330 appointees who served within the ten-year period.

Of the 330 data observations, 49 (14.8%) involve independent agency positions, 202 (61.2%) involve cabinet positions, 51 (15.5%) involve subcabinet positions, and 28 (8.5%) involve other executive agency positions. The data also reflects the level of position. Of the observations, 29 (8.8%) are heads of independent agencies, 20 (6.1%) are assistants to a head of an independent agency, 49 (14.8%) are cabinet secretaries, 57 (17.3%) are deputy cabinet secretaries, 23 (7%) are general under cabinet secretaries, 86 (26.1%) are assistant cabinet secretaries or specific under secretaries, 44 (13.3%) are heads of subcabinet entities or executive agencies, and 22 (6.7%) are assistants to a head of a subcabinet entity or executive agency. Figures 1.2 and 1.3 illustrate the breakdown of appointees by nominating President and by location of position, respectively.

[70] Trattner (2000).

Figure 1.2

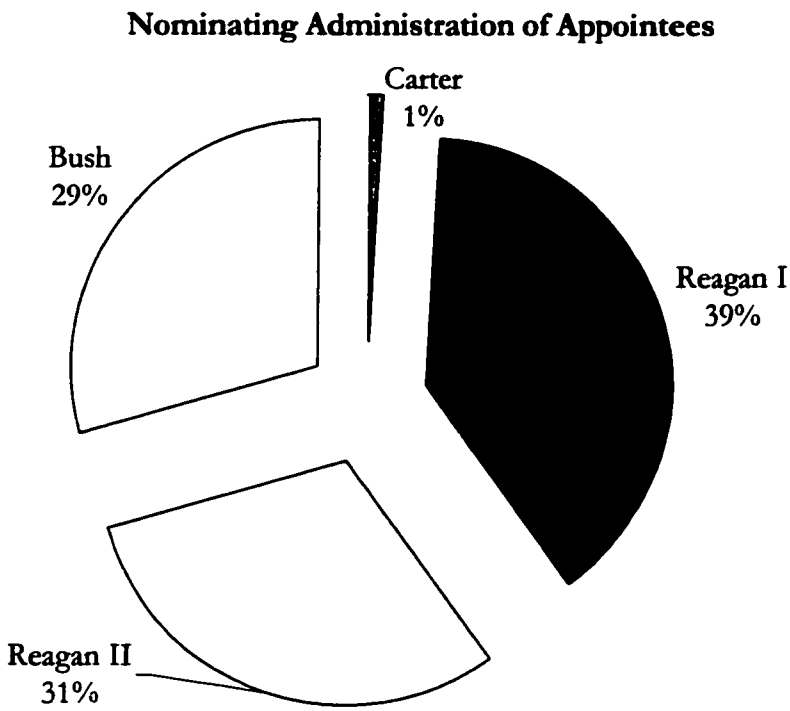
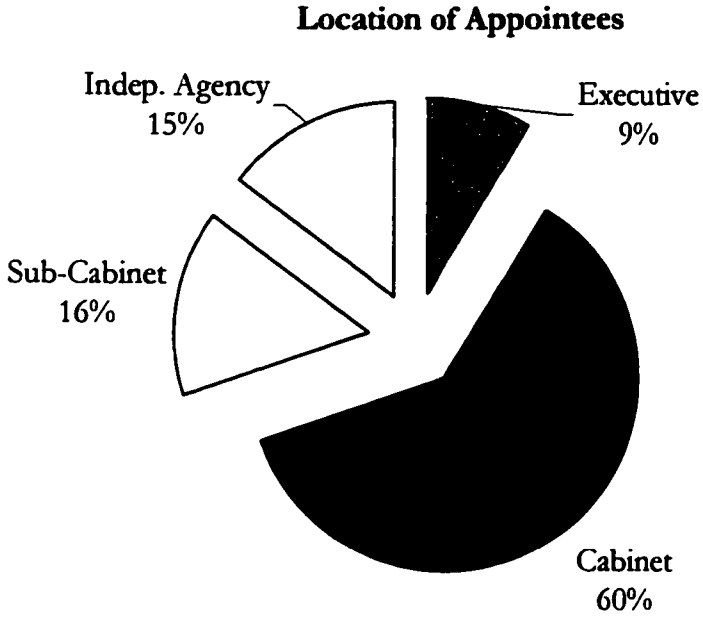


Figure 1.3

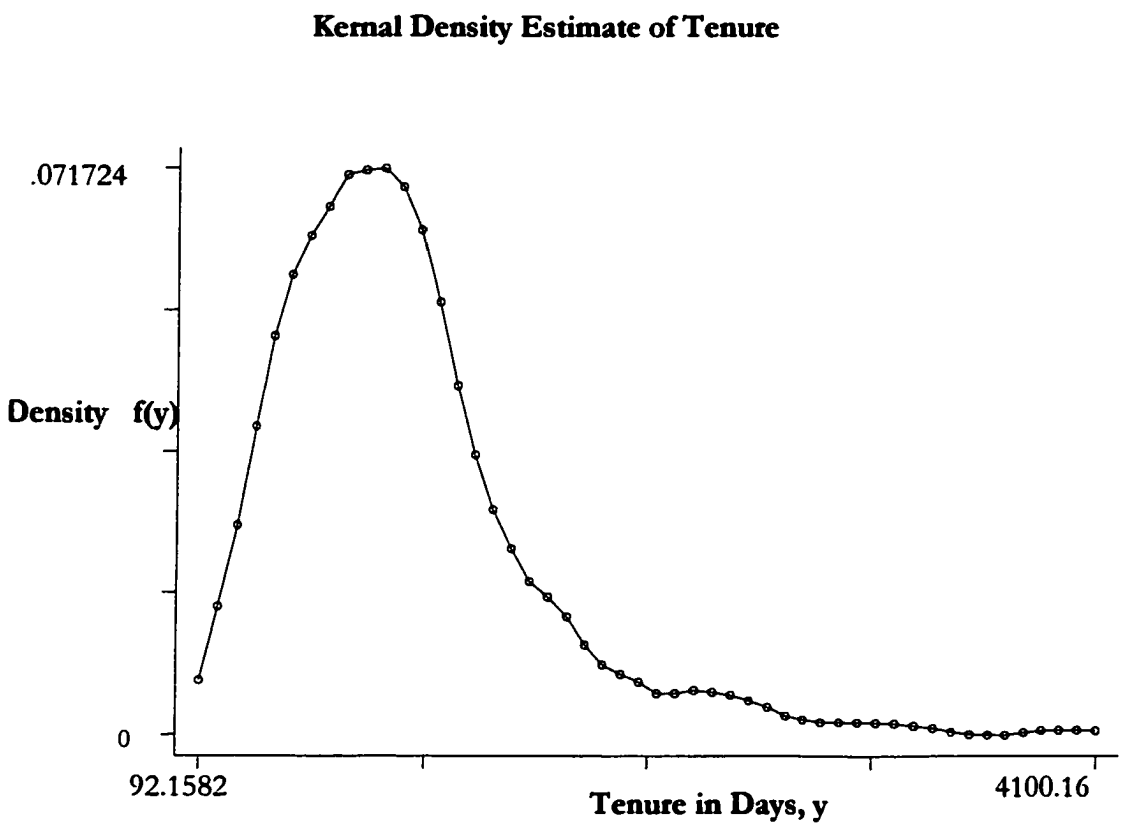


Cabinet departments include: Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, Treasury, and after 1989, Veterans Affairs. Subcabinet entities include: NIST, Bureau of the Census, NOAA, Air Force, Army, Navy, HCFA, FDA, NIH, DEA, FAA, FHA, NHTSA, and IRS. Executive agencies include: OMB, USTR, and Veterans Affairs (before it became a department). Independent agencies include: AID, CIA, EPA, FEMA, GSA, NASA, SBA, SSA, and USIA.

For each observation, I calculated the tenure of the appointee. The tenure data is censored in several ways. First, the data includes individuals still serving on September 30, 1991 (the last day of the GAO data set). Second, individuals who retire at the end of a President's administration cannot choose

to continue in their positions.[71] Third, five individuals died or fell critically ill during their appointments, never having made a conscious decision to retire. Of the 330 data observations, 127 (38.5%) are censored in one of these three ways. For these "censored" individuals, the data reflects tenure up to the relevant censoring event. Figure 1.4 displays a kernal density estimate of appointee tenure.

Figure 1.4



[71] This upper bound problem arises in the literature on cabinet duration as well where the "constitutional interelection period" caps cabinet tenure. King et al. (1990, 852, 860) treat observations that come close to this cap as censored.

The associated GAO report on the full data set (fixed and variable term positions) simply drops the observations connected to individuals still serving on September 30, 1991 and does not treat appointees who retire on the eve of the next inauguration as censored for its summaries of tenure by agency.[72] With hazard analysis, these observations can be used: The estimator weighs these observations by the survival function (the probability that an individual continues to serve given she has served up to time t).

For my subset of appointees, I collected considerable oversight and biographical information. I analyzed each hearing at which a given appointee testified. Using "Congressional Universe," I first counted the total number of hearings at which a given appointee appeared. For each hearing, I recorded whether it was before a House, Senate, or Joint Committee. I also determined if it was an appropriations hearing or an oversight hearing.[73] From this data, I calculated the total number of oversight and appropriations hearings as well as applicable hearing rates (dividing totals by tenure).[74]

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[72] GAO (1994, 2).

[73] It would also be possible to code for legislative hearings, where proposed statutes are discussed.

[74] DelSesto (1980) codes nuclear safety hearings at a more detailed level, examining entire transcripts and classifying each exchange between a committee member and a witness.

Table 1.1 lists the total number of appropriations and oversight hearings by agency for all the cabinet departments and most of the independent agencies in the data. For many of the agencies covered in the data, Figure 1.5 graphs the total number of hearings where the top official testified divided by the total tenure of individuals serving in that position during the time period of the data. The positions having the highest pace of hearings were Secretary of Treasury, Secretary of Energy, Secretary of Defense, Secretary of State, and Secretary of Commerce. Figure 1.6 limits this analysis to oversight hearings. The positions having the highest pace of oversight hearings were Administrator of the Environmental Protection Agency, Secretary of Defense, Secretary of Energy, and Secretary of Health and Human Services.

Table 1.1: Breakdown of Hearings by Agency

Agency	Appropriations Hearings	Oversight Hearings	Total Hearings
Agriculture	70	34	223
Commerce	99	61	357
Defense	368	210	615
Education	160	60	316
Energy	91	76	278
Health	101	81	335
Housing	51	47	139
Interior	56	32	129
Justice	79	42	260
Labor	65	82	257
State	85	34	211
Transportation	104	86	314
Treasury	84	104	484
Veterans Affairs	48	18	95
AID	48	32	107
CIA	0	10	28
EPA	34	66	167
FEMA	31	19	51
GSA	14	23	45
NASA	43	32	122
OMB	25	153	285
SBA	21	18	86
SSA	13	14	48
USIA	29	10	45
USTR	29	34	230

Commerce totals include NIST, Bureau of the Census, and NOAA. Defense totals include Army, Navy, and Air Force. Health and Human Services totals include NIH, FDA, and HCFA. Justice totals include DEA. Transportation totals include FAA and NHSTA. Treasury totals include IRS.

Figure 1.5

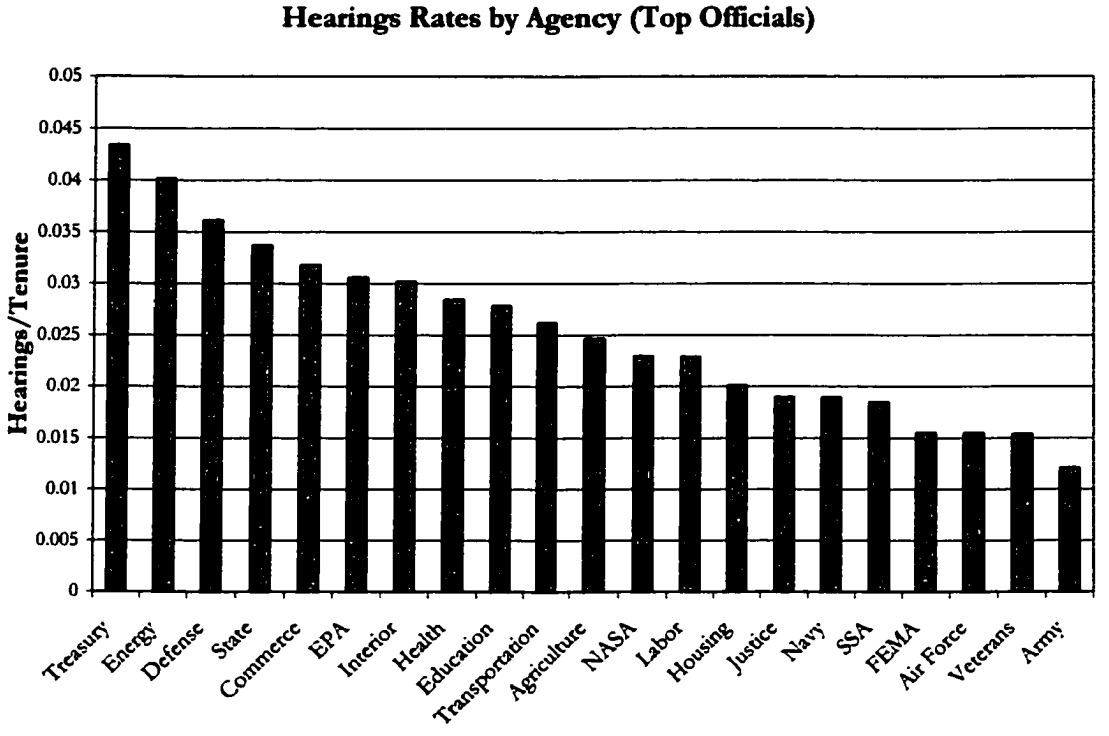
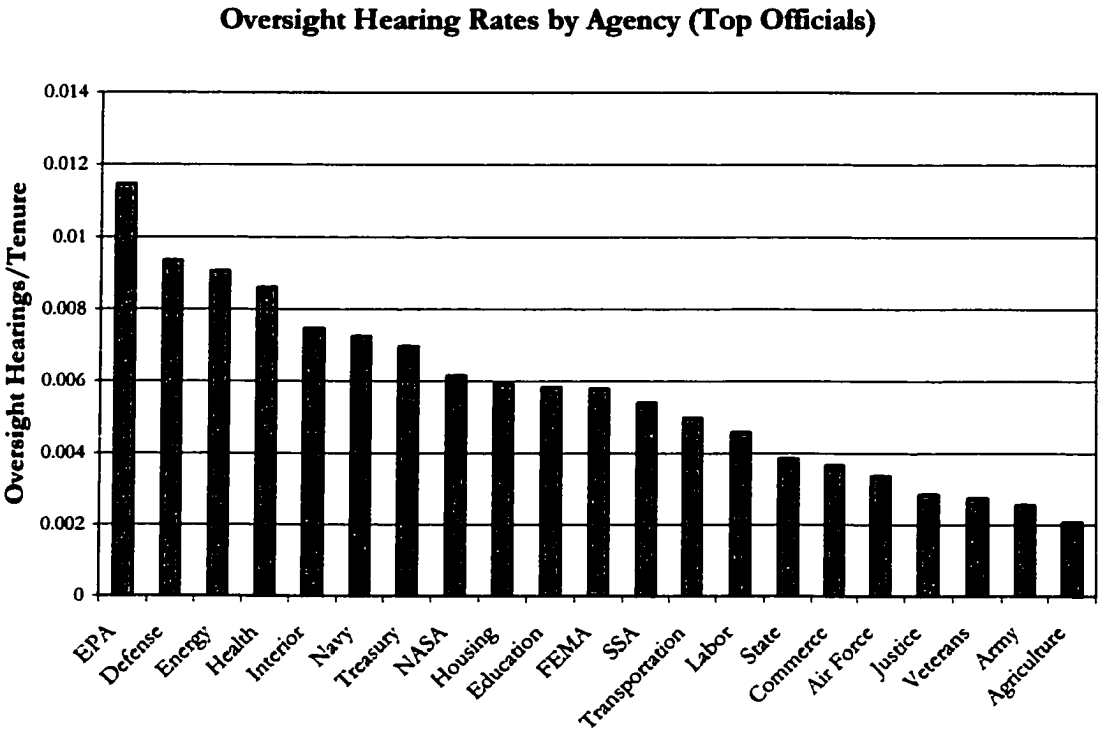


Figure 1.6



I created dummy variables to indicate which President (and in what term, if applicable) nominated the appointee and in which year of the presidential administration an appointee began serving. I included information about the partisan control of the House and Senate[75] and whether an appointee was serving when the Republicans controlled both the Senate and the

[75] These variables measure the percentage difference in numbers of Republican and Democratic members in the year of confirmation. An alternative would be to use the ideological difference between the President and the median Senator and between the President and the median House member. I could also extend either measure for each year of service as a time-varying covariate.

Presidency. I also recorded the fiscal year budget (in millions) for the agency on the starting date for each political appointee.[76]

I was able to collect biographical information for each appointee, including gender, age, education, type of employment prior to appointment, type of employment after appointment, and the existence of any previous federal experience. I also noted whether an appointee began serving prior to tighter "revolving door" restrictions on private employment in 1989.[77]

Appendix 1.A provides information about all of the variables in the data.

IV. Results

A. Stylized Facts

The hearing data reflects some interesting observations about congressional oversight. Given opportunity costs and benefits to members, I expected that House committees would conduct more hearings than Senate committees, with the difference narrowing for the highest level of appointed officials. Figure 1.7 displays for specific position levels of appointees the number of hearings called by the House and by the Senate. The Senate conducted slightly more hearings than the House only where a cabinet secretary

[76] An alternative to agency budgets would be employment figures. Some agencies control a large budget relative to staff size (for example, NASA) and employment numbers might be a better control.

[77] See fuller discussion in Appendix 1.A.

was a witness. For all other positions, the House conducted more hearings. The differences are even more pronounced when one examines oversight hearings. Figure 1.8 displays the breakdown of oversight hearings. In contrast, the two legislative bodies hold essentially the same number of appropriations hearings for each type of position.

The biographical data also reflects some interesting observations about how government service may fit into appointees' career objectives. First, appointees do seem to use government service as a stepping stone to the private sector. Table 1.2 displays the primary career patterns of the Reagan and Bush appointees in the data. Of all the observations, 190 appointees took a job in the private sector after their government service; 68 accepted a position in the federal government, and 40 took a position at a university, hospital or think tank.

Second, career paths do differ depending on when in an administration an appointee commences government service, providing some support for the theory proposed by Light (1991) and discussed by Andrews and Tomlinson (1999) that initial appointees are more likely to be party loyalists. Of the 178 appointees who started in the first year of a presidential administration, 27.5% came from a federal government job, 12.4% came from a national political job, 3.9% came from state or local government, 10.1% came from education, and

44.4% came from the private sector.[78] Of the 57 appointees who started in the second year, 59.6% came from a federal government job, 3.5% came from a national political job, 3.5% came from state or local government, 10.5% came from education, and 22.8% came from the private sector. Of the 60 appointees who started in the third year, 61.7% came from a federal government job, 11.7% came from a national political job, 1.7% came from state or local government, 10% came from education, and 15% came from the private sector. Of the 35 appointees who started in the fourth year, 71.4% came from a federal government job, 2.9% came from a national political job, none came from state or local government, 8.6% came from education, and 17.1% came from the private sector. Over an administration's four-year term, more and more appointees are plucked from another federal job to serve,[79] and generally fewer appointees come from the private sector (with the percentages being about equal during the final two years).[80] In the first year, there is the greatest percentage of appointees coming from national political work (either as a member of Congress, congressional staff, or national party employment),

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[78] The numbers may not total to 100 because some categories (retirement, judgeships, etc.) are not reported here.

[79] Some of these individuals are coming from other appointed positions.

[80] There has been a substantial jump in the percentage of nominees for political jobs coming from positions located in Washington D.C. in the past three

lending support to the theory that initial appointees are being rewarded for political service.

Third, employment after a government appointment does not seem to differ much depending on when appointed service began within the presidential administration. Of the appointees who started in the first year, 19.7% went to another federal government job and 57.9% went into the private sector. Of those who started in the second year, 28.1% went to another federal job and 56.1% took a private job. Of those who started in the third year, 18.3% stayed in federal service and 56.7% entered private industry. And of those who started in the final year, 17.1% took a federal job and 60% took a private job. Ideally one would want to measure the added benefit of government service. Did it lead to a significant step up on the career ladder? Such a step could be a higher salary or more prestige. How does the step compare to what would have occurred without appointed service? But the data records only the type of employment after a government appointment and does not indicate finer detail. It would also be challenging to measure convincingly counterfactual career paths.

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administrations as compared to nominees from 1933 to 1964. Mackenzie (2001, B5).

Figure 1.7

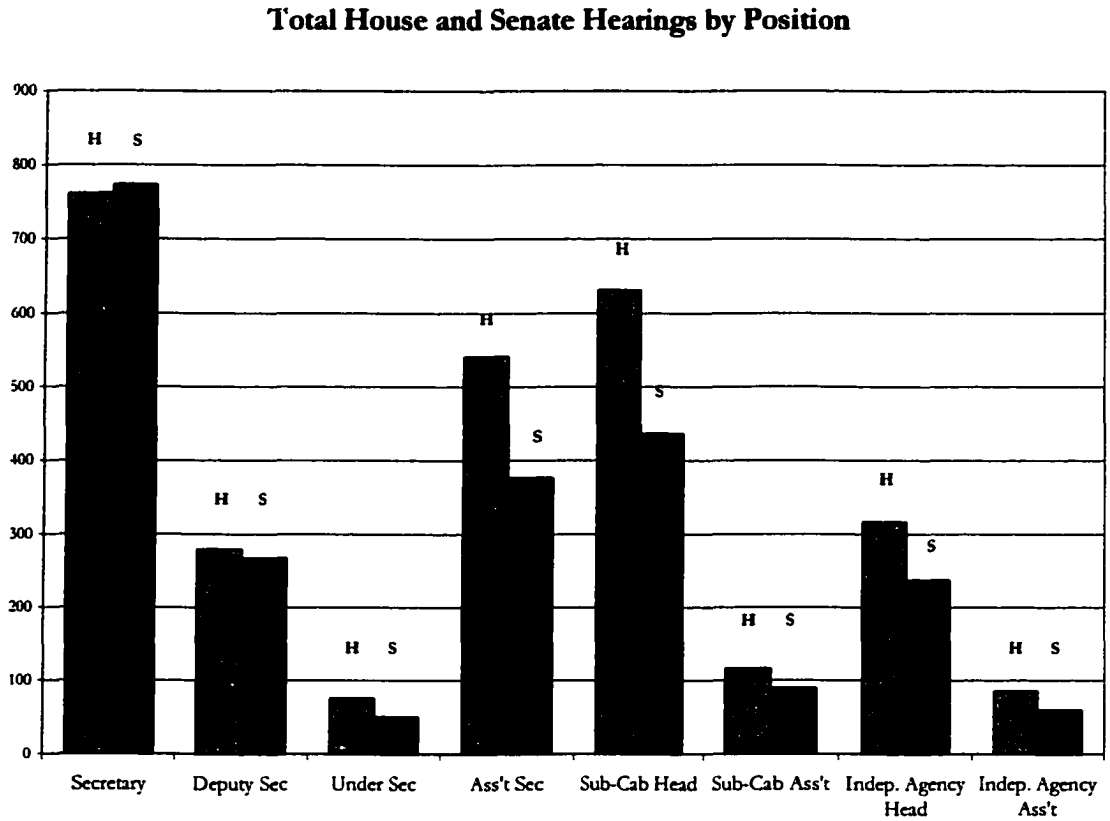

Figure 1.8

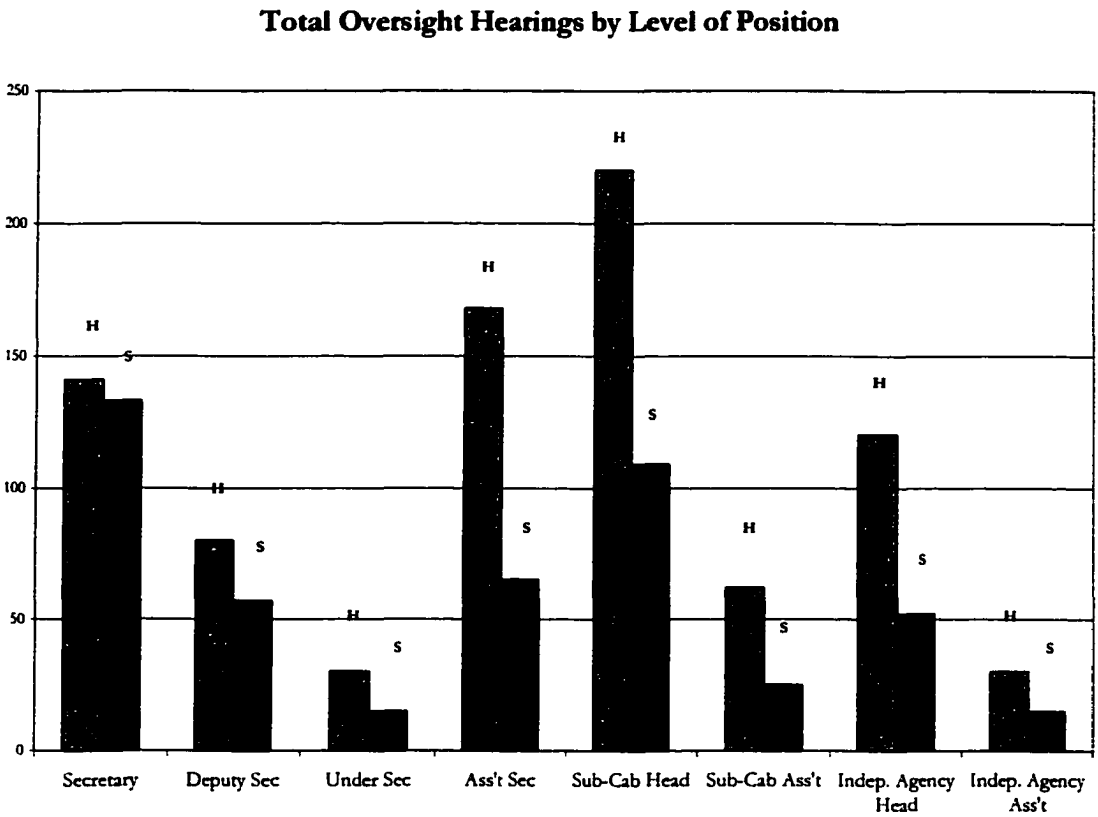

Table 1.2: Career Patterns of Appointees

		Job After Gov't Service				
		Federal Executive Service	State/ Local Executive Service	Political Job	Education	Private Sector
Job Before Gov't Service	Federal Executive Service	33	1	5	12	84
	State/Local Executive Service	1	0	0	2	7
	Political Job	5	0	1	3	21
	Education	3	0	1	16	13
	Private Sector	26	2	1	7	63

The remaining observations reflect individuals who left or joined the federal bench, came out of or entered retirement, became drastically ill, died, or went to jail. The totals in the text reflect these remaining observations.

B. Cox Proportional Hazard Model Results

I ran several CPH models related to my set of hypotheses.[81] Due to multicollinearity in the data, I could not include all the hearing variables in the

[81] I chose the CPH model because it imposed fewer restrictions than other duration models on the function of the hazard rate and because it accorded with rough examinations of the data. One can test more rigorously for evidence of non-proportionality of the data. See Box-Steffensmeier and Zorn (2001, 1998).

same model. In all of the models tested, I included the rate of appropriations hearings and the rate of oversight hearings.

In addition to the hearing rates, the first model includes the agency's budget, type of agency, level of position,[82] the nominating administration, the year within the administration of confirmation, partisan control of the House and Senate, and biographical and career path information. Table 1.3 presents the results. Because some individuals served in multiple positions within the data, I use robust standard errors.

The coefficients on the hearing rates have the expected signs—appropriations hearings have a negative effect on the hazard rate (in other words, a positive effect on tenure) and oversight hearings have a positive effect on the hazard rate (in other words, a negative effect on tenure)—but neither is statistically significant at conventional levels. The model provides some support for the institutional hypotheses. Compared to cabinet positions (the dummy variable for agency type that was excluded to prevent singularity), all other agency types (subcabinet, independent, and other executive agencies) have a positive effect on tenure. But being a cabinet secretary also has a negative effect on the hazard rate, or a positive effect on tenure. Lower cabinet

[82] Due to multicollinearity, I included only variables indicating whether the position was a cabinet secretary and whether the position was an assistant secretary (or some other specific cabinet position that does not fall under a subcabinet entity). See Appendix 1.A for more information.

department positions are likely less attractive than other appointed positions. The President may be more willing to support his highest level appointees before Congress but is less able to protect assistant or under secretaries. The results on assistant secretaries are, however, inconclusive. The only other interesting effect concerns appointee age and tenure. The expectation was that younger appointees serve shorter stints in government positions. But older age at the time of confirmation in this model has a positive effect on the hazard rate (and a negative effect on tenure). The confidence interval of the squared age term, though statistically significant, includes both positive and negative coefficients so its specific effect cannot be determined. Box-Steffensmeier and Zorn (1998) caution that age variables in an analysis of Supreme Court Justice tenure do not satisfy the proportionality assumption required for the CPH model.

This first model has at least one major weakness. It does not control for the individual agencies but instead includes general measures of agency type. Table 1.4 presents the results of a second model, which essentially replaces the general controls in the first model with specific agency variables.[83]

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[83] With the exclusion of the agency type variables, I could include two variables that had been excluded from Model 1 due to multicollinearity—one indicating whether the position was an Administrator of an independent agency and one interactive variable of party control of the House and Senate. The dummy variable for the Agriculture Department was the one agency level variable excluded in Model 2.

The hearing rates in the second model also have the expected signs but are now statistically significant. A higher rate of appropriations hearings seems to increase tenure, whereas a higher rate of oversight hearings appears to decrease tenure.[84] The results concerning the institutional hypotheses are harder to decipher. Because the model includes specific variables for the agencies, it does not test the effect of general agency type on tenure. Being a cabinet department secretary or head of an independent agency has a negative effect on the hazard rate and consequently a positive effect on tenure. There does seem to be variation among agencies concerning appointee tenure. A position in the Defense Department (including the individual services), Treasury Department, or Office of Management and Budget has a positive effect on tenure. A position in the Interior Department, Small Business Administration, or Social Security Administration has a negative effect on tenure. Republican appointees working in conventionally conservative issue areas such as national defense or regulatory control seem to stay longer. Finally, appointees at agencies with smaller budgets stay longer.[85] Interestingly,

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[84] This analysis presumes that the measure for oversight hearings is a proxy for perceived misbehavior by appointees. It also presumes that appointees do not decide ex ante how long they will stay in Washington, D.C. and then act accordingly.

[85] This seems to conflict at first glance with the result on appropriations hearings. Nevertheless, by controlling for the size of the agency's budget, the

the model says little about career stories; the results regarding biographical or career expectations are not significant.

It is somewhat surprising that the second model provides no support for the expectation that Reagan and Bush appointees confirmed under a Democratic Senate would stay for a shorter period of time than those confirmed prior to the change of party control in the Senate or for the expectation that Bush appointees who typically had more federal experience would stay longer than Reagan appointees. Because there is substantial overlap between appointees confirmed in the second half of a President's administration and appointees confirmed after the Republicans lost control of the Senate in 1986, I include only the dummy variable for first year appointees and drop variables for subsequent years in the third model. Table 1.5 presents results for Model 3.

The third model produces some of the most interesting results. Most important, the substantive results from the second model continue to hold. Specifically, the rate of oversight hearings is still associated with shorter tenure and the rate of appropriations hearings is connected to longer tenure. But this model also provides support for the "divided government" (or at least split control between the executive branch and the Senate) and some of the career

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rate of appropriations hearings may signal more congressional support for agency activity.

hypotheses. Appointees confirmed under a Republican-controlled Senate stay longer. Party control of the House is not statistically significant. Compared to appointees who started in Reagan's first term, appointees who began under Carter or Bush have longer tenures. This result is consistent with the theory that Reagan's appointees often lacked federal experience and were perceived to be more hostile to the government agencies they ran. There is, however, no support for the theory that appointees confirmed in the first year of a President's administration serve shorter tenures. It could be that these appointees—even if partisan loyalists—enter the government when the end of a term is furthest away and consequently have more opportunities to enact their preferred policies. There is also no support for the career-climbing (into the private sector) story, at least to the extent it is connected to length of tenure.

I calculate the effects on the hazard rate for a subset of independent variables for the third model in Table 1.6. To calculate the percent change in the hazard ratio for a change in a independent variable, I apply the following formula using the means of the covariates:

$$\%\Delta h_i(t) = [\frac{e^{\beta' x_2} - e^{\beta' x_1}}{e^{\beta' x_1}}](100)$$

where x_1 represents the starting value of interest for an independent variable and x_2 represents the ending value of interest for the same variable. All other independent variables are set to their means.

An increase in the rate of oversight hearings from 0.5 to 1.0 increases an appointee's hazard rate by 31.81 percent. An increase in the rate of appropriations hearings from 0.5 to 1.0 decreases an appointee's hazard rate by 17.96 percent. A change from non-Secretary status to Secretary status decreases an appointee's hazard rate by 56.92 percent. And a change from a Republican-controlled to a Democratic-controlled Senate (where the difference between the number of Democratic and Republican senators divided by the total number of senators moves from 0.1 to -0.1) increases the hazard rate 171 percent.[86]

There are potentially important variables that are currently omitted from the analysis. First, the time from nomination to appointment could be relevant. To the extent that longer confirmation battles represent conflict between the executive and legislative branches over a particular policy or position, it would be important to control for conflict that exists ex ante. Or as McCarty and Razaghian (1999) suggest, to the extent that ex ante confirmation battles function as a substitute to ex post oversight mechanisms, it would be important

[86] To make this analysis more transparent, it would be necessary to determine the uncertainty of these estimated quantities of interest.

to control for pre-confirmation events. Second, the treatment of congressional hearings ignores their precise distribution throughout an appointee's tenure. The hearing variables incorporate the length of tenure of each individual, controlling for the fact that the longer an appointee serves, the more hearings she is likely to face. But the hearing rate variables make a particularly strong assumption that the hearings are evenly distributed. Suppose an appointee is called to testify on day 6, 8, 10, and 12 and that she retires on day 12. The hearing rate would be 0.33. The CPH model incorporates this hearing rate as a predictor of the hazard rate in the first half of the appointee's tenure even though the appointee did not testify during the first half of her tenure. A possible solution is to include hearings for given time units (first month, second month, etc.) as a time varying covariate in the regressions. Due to the length of tenure, the number of covariates that would be introduced may, however, make any interesting analysis impossible. Although hearings are presumably not independent events, the hearings do seem to be relatively evenly distributed throughout an appointee's tenure. Third, the partisan dynamics used in the model are taken solely from the year of confirmation. But such dynamics continue to change over an appointee's tenure. It would probably be worthwhile to include time-varying covariates to reflect this ongoing interaction.

Table 1.3: Cox Proportional Hazard Model 1

OVERSIGHT HEARING RATE	0.24 (0.15)	**FEDERAL EXPERIENCE**	0.15 (0.20)
APPROPRIATION HEARING RATE	-0.24 (0.18)	**PRIOR JOB IN PRIVATE SECTOR**	0.04 (0.21)
BUDGET	2.88E-7 (1.35E-6)	**CLIMBER (PREPUBLIC POST PRIVATE)**	0.00 (0.18)
SUBCABINET ENTITY	-0.93*** (0.27)	**CARTER**	-1.26 (2.67)
INDEPENDENT AGENCY	-0.81*** (0.25)	**REAGAN (2^{ND} TERM)**	0.52 (0.40)
EXECUTIVE (NON-CABINET) AGENCY	-0.78* (0.41)	**BUSH**	0.46 (1.11)
SECRETARY	-0.93** (0.32)	**FIRST YEAR IN ADMINISTRATION**	-0.80 (0.83)
ASSISTANT SECRETARY	-0.21 (0.23)	**SECOND YEAR IN ADMINISTRATION**	-0.93 (0.83)
FEMALE	-0.20 (0.32)	**THIRD YEAR IN ADMINISTRATION**	0.18 (0.40)
AGE	0.14* (0.08)	**HOUSE CONTROL**	7.55 (7.65)
AGE^2	-1.56E-3* (8.50E-4)	**SENATE CONTROL**	1.38 (3.39)
LAW DEGREE	-0.20 (0.18)		
IN D.C. AREA PRIOR TO CONFIRMATION	-0.28 (0.22)		
PAST POLITICIAN POLITICAL STAFF	0.14 (0.32)		

N=330. Robust standard errors (on the person serving) were used (320 subjects). *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$ (one tail) . χ^2=79.40***.

Table 1.4: Cox Proportional Hazard Model 2

OVERSIGHT HEARING RATE	0.56** (0.22)	**CARTER**	-1.71 (2.85)
APPROPRIATION HEARING RATE	-0.39* (0.23)	**REAGAN (2ND TERM)**	0.49 (0.43)
BUDGET	6.36e-6*** (1.93e-6)	**BUSH**	0.45 (1.16)
SECRETARY	-0.84** (0.34)	**FIRST YEAR IN ADMINISTRATION**	-0.85 (0.89)
ASSISTANT SECRETARY	-0.01 (0.26)	**SECOND YEAR IN ADMINISTRATION**	-1.05 (0.89)
HEAD OF INDEP. AGENCY	-0.92** (0.44)	**THIRD YEAR IN ADMINISTRATION**	0.32 (0.43)
FEMALE	-0.31 (0.39)	**HOUSE CONTROL**	11.82 (7.93)
AGE	0.06 (0.09)	**SENATE CONTROL**	0.68 (3.54)
AGE^2	-7.61E-4 (8.78E-4)	**HOUSE CONTROL* SENATE CONTROL**	-0.00 (0.06)
LAW DEGREE	-0.11 (0.22)	**DEFENSE DEPARTMENT**	-0.95* (0.49)
IN D.C. AREA PRIOR TO CONFIRMATION	-0.18 (0.23)	**INTERIOR DEPARTMENT**	1.09** (0.45)
PAST POLITICIAN POLITICAL STAFF	0.14 (0.33)	**TREASURY DEPARTMENT**	-0.89** (0.42)
FEDERAL EXPERIENCE	0.17 (0.22)	**OMB**	-2.04** (0.91)
PRIOR JOB IN PRIVATE SECTOR	0.05 (0.26)	**SBA**	1.45* (0.74)
CLIMBER (PRE PUBLIC POST PRIVATE)	-0.01 (0.19)	**SSA**	1.36** (0.67)

N=330. Robust standard errors (on the person serving) were used (320 subjects). ** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$ (one tail). χ^2=119.29***. Dummy variables for all agencies (excluding Agriculture) were included.

Table 1.5: Cox Proportional Hazard Model 3

OVERSIGHT HEARING RATE	0.55** (0.22)	**CARTER**	-4.34** (1.65)
APPROPRIATION HEARING RATE	-0.40* (0.23)	**REAGAN (2ND TERM)**	-0.09 (0.25)
BUDGET	6.40e-6*** (1.96e-6)	**BUSH**	-1.47** (0.50)
SECRETARY	-0.84** (0.34)	**FIRST YEAR IN ADMINISTRATION**	0.18 (0.25)
ASSISTANT SECRETARY	-0.01 (0.25)	**HOUSE CONTROL**	-0.19 (3.35)
HEAD OF INDEP. AGENCY	-0.93** (0.43)	**SENATE CONTROL**	-4.98** (1.86)
FEMALE	-0.26 (0.38)	**HOUSE CONTROL* SENATE CONTROL**	0.00 (0.06)
AGE	0.05 (0.09)	**DEFENSE DEPARTMENT**	-0.94* (0.49)
AGE^2	-6.06E-4 (8.60E-4)	**INTERIOR DEPARTMENT**	1.13** (0.46)
LAW DEGREE	-0.12 (0.22)	**TREASURY DEPARTMENT**	-0.86** (0.43)
IN D.C. AREA PRIOR TO CONFIRMATION	-0.16 (0.23)	**OMB**	-2.02** (0.91)
PAST POLITICIAN POLITICAL STAFF	0.16 (0.32)	**SBA**	1.48** (0.75)
FEDERAL EXPERIENCE	0.14 (0.22)	**SSA**	1.35** (0.67)
PRIOR JOB IN PRIVATE SECTOR	0.07 (0.26)		
CLIMBER (PRE PUBLIC POST PRIVATE)	0.01 (0.19)		

N=330. Robust standard errors (on the person serving) were used (320 subjects). *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$ (one tail). χ^2=98.34***. Dummy variables for all agencies (excluding Agriculture) were included.

Table 1.6: Effects on the Hazard Rate for Model 3

Variable	X_1	X_2	$\%\Delta h_i(t)$
OVERSIGHT HEARING RATE	0.5	1	31.81%
APPROPRIATION HEARING RATE	0.5	1	-17.96%
SECRETARY	0	1	-56.92%
SENATE CONTROL	0.1	-0.1	171.00%

Values of X_1 and X_2 were mean centered.

V. Conclusion

In his study of the executive branch, Heclo concluded, "In dealing with outside villagers who know each other . . . appointees can find that reprisals for any misdeeds are extraordinarily oblique and powerful. The political executive system may be a government of strangers, but its members cannot act as if everyone else is."[87] A study of appointee tenure can begin with factors internal to appointees or the bureaucracies that they serve. Appointees do seem to use government service as a stepping stone to private sector jobs. But a political appointment may not be necessary for a transition from the public sector to private sector. In any event, career motivations, as captured by proxy

[87] Heclo (1977, 112).

measures of job type before and after appointment, do not appear to impact appointee tenure.

A study of appointee tenure would not, however, be complete if it considered only internal stories; it should also analyze institutional and political factors. Appointees operate in a charged political context, accountable to a number of principals. Congressional hearings, one mechanism of oversight (activated either by traditional police patrols or by fire alarms sounded by interest groups), appear to have a significant effect on appointee tenure. Appointees facing more oversight hearings (roughly indicating "misbehavior") during their tenure do tend to retire faster and those facing more appropriations hearings (roughly indicating scope of agency activity) tend to retire slower. These results suggest that ex post oversight by one branch of government may be effective.

Of course, hearings are not the only way to oversee appointees. Other oversight mechanisms might be interesting to consider. For example, do appointees who get sued a lot by interest groups or other government actors retire faster? Such work assumes that tenure measures, however crudely, some aspect of policy compliance.[88] Hamilton suggested in the *Federalist Papers*,

[88] Wood and Waterman (1991, 822).

No. 76, that senators would rarely vote to reject an appointee's nomination because they "could not even be certain that a future nomination would present a candidate in any degree more acceptable to them."[89] But senators could vote to confirm knowing that they could harass appointees later. And enough harassment may prompt appointees to leave. And such departures may lead to changes in agency decisions. Wood and Waterman (1991) found that in five of their seven case studies when political appointees changed so did agency decisions. While detailed work on actual policy outcomes may produce more compelling information on the efficacy of such oversight mechanisms, studies of appointee tenure appear to provide some insight into the dynamics of bureaucratic oversight.

[89] Quoted in Hammond and Hill (1993, 23).

Appendix 1.A

In this Appendix, I explain the sources of the data, how positions were selected, and how the variables were constructed. Table 1.7 provides descriptive statistics for most of the variables in the data.

1. Positions and Tenure

For a ten-year period from October 1, 1981 through September 30, 1991, the General Accounting Office (GAO) collected data on 567 executive positions filled by persons appointed by the President and confirmed by the Senate, which included 409 positions where the individual serves indefinitely at the pleasure of the President and 158 positions with a fixed term of office.[90] For each position, the GAO data contains the names of all individuals who served within the ten-year period and their respective starting dates. The data also contains the ending dates of service if the individual left prior to September 30, 1991.[91]

I chose a subset of the 409 indefinite (or variable) term positions, which encompasses (1) all secretaries and general under or deputy secretaries of

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[90] While top appointees (such as cabinet secretaries) now serve at the President's pleasure, some positions (such as the Secretary of War and the Secretary of the Navy) used to have terms longer than that of the President who appointed them. Such appointees could be removed only with the consent of the Senate. Tenure of Office Act of 1867, ch. 154, 14 Stat. 430.

[91] GAO (1994). Matt Dickinson graciously shared this data.

cabinet departments (including the Office of the United States Trade Representative since its top position had cabinet status during this period), (2) indefinite term positions (and any connected deputy positions that required Senate confirmation) in The 2000 Prune Book: How to Succeed in Washington's Top Jobs[92] that existed during the time period covered in the GAO data, and (3) any remaining top administrators and their primary deputies for the largest independent agencies if their positions required Senate confirmation and were not assigned a fixed term.

I used the following cabinet positions:

Agriculture Department (Secretary; Deputy Secretary)
Commerce Department (Secretary; Deputy Secretary)
Defense Department (Secretary; Deputy Secretary)
Education Department (Secretary; Deputy Secretary; Under Secretary)
Energy Department (Secretary; Deputy Secretary; Under Secretary)
Office of the U.S. Trade Representative (Trade Representative; Deputy Trade Representative)
Health and Human Services Department (Secretary; Deputy Secretary; Under Secretary)
Housing and Urban Development Department (Secretary; Deputy Secretary; Under Secretary)
Interior Department (Secretary; Under Secretary)
Justice Department (Attorney General; Deputy Attorney General)
Labor Department (Secretary; Under Secretary)
State Department (Secretary; Deputy Secretary)
Transportation Department (Secretary; Deputy Secretary)
Treasury Department (Secretary; Deputy Secretary)

[92] Trattner (2000).

Veterans Affairs Department[93] (Administrator; Deputy Administrator; Deputy Secretary)

I used the following Prune Book positions:

Agency for International Development (Administrator; Deputy Administrator)
Agriculture Department (Under Secretary for Food, Nutrition and Consumer Services)
Commerce Department (Under Secretary for Export Administration; Assistant Secretary for Export Administration; Assistant Secretary for Trade Development; Director, National Institute of Standards and Technology; Director, Bureau of the Census; Under Secretary for Oceans and Atmosphere and Director of the National Oceanic and Atmospheric Administration)
Defense Department (Secretary and Under Secretary of the Air Force; Secretary and Under Secretary of the Army; Secretary and Under Secretary of the Navy; Under Secretary for Acquisition, Technology and Logistics; Director, Defense Research and Engineering; Assistant Secretary for Command, Control, Communications and Intelligence; Comptroller)
Education Department (Assistant Secretary for Elementary and Secondary Education; Assistant Secretary for Post Secondary Education; Assistant Secretary for Special Education and Rehabilitative Services; Assistant Secretary for Vocational and Adult Education; Assistant Secretary for Educational Research and Improvement)
Federal Emergency Management Agency (Director; Deputy Director)
Health and Human Services Department (Commissioner, Food and Drug Administration; Director, National Institutes of Health; Administrator, Health Care Financing Administration; Assistant Secretary for Children and Families)
Housing and Urban Development Department (Assistant Secretary for Housing and Federal Housing Commissioner)
Justice Department (Solicitor General; Assistant Attorney General, Antitrust Division; Administrator and Deputy Administrator, Drug Enforcement Administration)
Labor Department (Assistant Secretary for Occupational Safety and Health; Assistant Secretary for Pension and Welfare Benefits; Assistant Secretary for Employment and Training)

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[93] In 1989, Veterans Affairs became a Department.

Office of Management and Budget (Director; Deputy Director)
Social Security Administration (Commissioner)
State Department (Under Secretary for Political Affairs)
Transportation Department (Administrator, National Highway Transportation Safety Administration; Administrator and Deputy Administrator, Federal Aviation Administration)
Treasury Department (Commissioner, Internal Revenue Service; Assistant Secretary for Economic Policy; Assistant Secretary for Tax Policy)

I used the following independent agency positions:

Central Intelligence Agency (Director; Deputy Director)
Environmental Protection Agency (Administrator; Deputy Administrator)
General Services Administration (Administrator)
National Aeronautics and Space Administration (Administrator; Deputy Administrator)
Small Business Administration (Administrator)
United States Information Agency (Director; Deputy Director)

I did not include indefinite term appointees from the following agencies that were in the GAO data set: ACTION, Commission of Federal Pay, Federal Mediation and Conciliation Service, Archivist of the United States, National Endowment for the Arts and Humanities, Alaska Natural Gas Transportation System, Overseas Private Investment Corporation, Peace Corps, Selective Service, and Arms Control and Disarmament Agency.

For the selected positions, I calculated the tenure of each individual (TENURE).[94] Tenure in the data ranges from 53 to 3969 days. The tenure

[94] I noticed three mistakes in end dates of service in the GAO data, which I corrected using information from news databases and the Public Papers of the President. I deleted two individuals who had left their positions prior to 1981 and one individual who, though listed in the GAO data set, was never confirmed by the Senate.

data is censored in several ways. First, the data includes individuals still serving on September 30, 1991 (the last day of the GAO data set). In the data set, 77 observations are censored because of the GAO's data collection. Second, individuals who retire at the end of a President's tenure cannot choose to continue in their positions.[95] In the data set, 45 observations are censored in this manner. Third, five individuals died or fell critically ill during their appointments, never having made a conscious decision to retire.[96] The dummy variable CENSOR identifies observations censored in any of these three ways. Of the 330 data observations, 127 (38.5%) are censored. For these "censored" individuals, the data reflects tenure up to the relevant censoring event.

2. Hearings Variables

Using Congressional Universe (Congressional Information Service, Inc.), I counted the number of hearings where each individual appeared as a witness in a given position (TOTALHEARING).[97] The number of hearings for one

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[95] In late November, the Clinton Administration sent letters to most political appointees (excluding inspectors general and independent agency heads) asking for official letters of resignation effective January 20, 2001. White (2001, A35). In the data, there is only one end of a presidential administration—when President Reagan left and President Bush entered office in January 1989. I counted an observation as censored in this manner if the individual left between October 1, 1988 and March 31, 1989.

[96] The better option might be to delete these five observations.

[97] The appointee must have been a witness who testified at the hearing or had to be listed under the witness field in Congressional Universe as accompanying

individual appointee ranged from 0 to 94.[98] For each hearing, I recorded whether it was before a House, Senate or Joint Committee or before a Commission; I then compiled totals for a given appointee (TOTALHOUSE, TOTALSENATE, TOTALJOINT and TOTALCOMM). I also recorded whether it was an appropriations hearing[99] or an oversight hearing.[100] From

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someone else. I did not include hearings where the individual was testifying before being confirmed. In other words, I did not count an individual's confirmation hearing for the position assigned to the observation. I did, however, count confirmation hearings for other executive positions at the end of the individual's tenure in a given position. For those individuals still serving on September 30, 1991, I counted hearings up to this date.

[98] A hearing could have multiple sessions. If the appointee testified on different days and if the sessions were treated separately in Congressional Universe (i.e., multiple witness lists and summaries of testimony), I counted each session as a separate hearing.

[99] If the title of the hearing, the committee name, summary, or the content notation field of the Congressional Universe index contained the word "appropriations," the hearing was counted as an appropriations hearing. (For Treasury secretaries and deputy secretaries, assistant secretaries for tax policy, IRS officials, and OMB officials, this rule was followed only if the hearing was about the budget of the respective agency. Consequently, if an OMB official testified about the entire presidential budget in front of the House Appropriations Committee, I did not classify it as an appropriations hearing.) If the hearing was about an agency's budget or appropriations request, it was also counted. If only the phrase "FY88 budget issues" appeared and it was clear from the summary that it was not about a specific budget, the hearing was not counted as an appropriations hearing. If the title and summary referred only to "budget authorization" and the committee was not a budget or appropriations committee, I did not count the hearing as an appropriations hearing. A hearing can be classified both as appropriations and oversight.

[100] If the title of the hearing contained the word "oversight" or "investigation," the hearing was counted as an oversight hearing. If the committee was the House Committee on Government Operations or the Senate Committee on

this data, I calculated for each individual the total number of oversight hearings (OVERSIGHT), total number of House oversight hearings (OVERHOUSE), total number of Senate oversight hearings (OVERSENATE), total number of joint committee oversight hearings (OVERJOINT), total number of appropriations hearings (APPROPRIATION), total number of House appropriations hearings (APPHOUSE), and total number of Senate appropriations hearings (APPSENATE). I then calculated hearing rates by dividing these totals by the appointee's tenure. The main rates are

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Governmental Affairs, the hearing was counted as an oversight hearing. For example, on October 31 and November 9, 1989, the House Committee on Government Operations held a hearing entitled "FDA's Continuing Failure to Regulate Health Claims for Food", at which the FDA Commissioner testified. If the summary description or content notation fields of Congressional Universe contained one of the following words or phrases, it was counted as an oversight hearing: "oversight"; "investigation"; "justification" or "defense" of action or program; "controversy"; "responses" to concerns, deficiencies, delays or cutbacks; "examination"; "collapse"; "criminal activity"; GAO report or investigation; "addressing problems with agency". A hearing can be classified both as appropriations and oversight. For example, a hearing whose title contained the words "Oversight of Budget X" would be counted as both an appropriations and oversight hearing. But the phrase "(submitted justification p.xx-yy)" in the summary of an appropriations hearing did not make the hearing an oversight hearing.

HEARRATE,[101] OVERRATE,[102] APPRATE,[103] HOUSERATE,[104] and SENATERATE.[105]

3. Institutional Variables

To reflect the level of position, I created a series of dummy variables: heads of independent agencies (INDHEAD), assistants to a head of an independent agency (INDASST), cabinet secretaries (SECRETARY),[106] deputy cabinet secretaries (DEPSEC),[107] general under cabinet secretaries (UNDERSEC), deputy or under cabinet secretaries (DEPUNDSEC),[108] assistant cabinet secretaries or specific under secretaries (ASSTAREA),[109] heads

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[101] This variable is defined as (TOTALHEARING/TENURE)*100.

[102] This variable is defined as (OVERSIGHT/TENURE)*100.

[103] This variable is defined as (APPROPRIATION/TENURE)*100.

[104] This variable is defined as (TOTALHOUSE/TENURE)*100.

[105] This variable is defined as (TOTALSENATE/TENURE)*100.

[106] This variable includes all cabinet secretaries, including the Attorney General and the U.S. Trade Representative.

[107] This variable includes general deputy secretaries, including the Deputy Attorney General and Deputy U.S. Trade Representatives.

[108] This variable takes on a value of 1 if DEPSEC or UNDSEC takes a value of 1.

[109] This variable includes under secretaries and assistant secretaries assigned specific areas (for example, Under Secretary of Agriculture for Food, Nutrition and Consumer Services).

of subcabinet entities or executive agencies (SUBCABHEAD),[110] and assistants to a head of a subcabinet entity or executive agency (SUBCABASST). Of the observations, 29 (8.8%) are heads of independent agencies, 20 (6.1%) are assistants to a head of an independent agency, 49 (14.8%) are cabinet secretaries, 57 (17.3%) are deputy cabinet secretaries, 23 (7%) are general under cabinet secretaries, 86 (26.1%) are assistant cabinet secretaries or specific under secretaries, 44 (13.3%) are heads of subcabinet entities or executive agencies, and 22 (6.7%) are assistants to a head of a subcabinet entity or executive agency.

To reflect the type of executive agency in which the position was located, I created another series of dummy variables: independent agency (INDAGENCY),[111] cabinet department (CABINET),[112] subcabinet entity (SUBCABINET),[113] and other executive entity (EXECUTIVE).[114] I also

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[110] This variable includes executive agencies (Office of Management and Budget and Veterans Affairs before it became a department) and subcabinet entities (such as the Air Force, Army, Navy). See description of EXEC and SUBCAB.

[111] Independent agencies include: AID, CIA, EPA, FEMA, GSA, NASA, SBA, SSA, and USIA.

[112] Cabinet departments include: Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, Treasury, and after 1989, Veterans Affairs.

[113] Subcabinet entities include: NIST, Bureau of the Census, NOAA, Air Force, Army, Navy, HCFA, FDA, NIH, DEA, FAA, NHTSA, and IRS.

created dummies for each individual agency.[115] In the data, 49 (14.8%) of the observations are independent agency positions, 202 (61.2%) are cabinet positions, 51 (15.5%) are subcabinet positions, and 28 (8.5%) are other executive agency positions.

I also recorded the fiscal year budget (in millions) for the agency on the start date for each political appointee (BUDGET).[116]

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[114] Other executive entities include: OMB, USTR, and Veterans Affairs before it became a Department.

[115] The list of individual agencies encompasses: Agriculture, Commerce, NIST, Bureau of the Census, NOAA, Commerce2 (includes Commerce, NIST, Bureau of the Census, and NOAA), Defense, Army, Navy, Air Force, Defense2 (includes Defense, Army, Navy, and Air Force), Education, Energy, Health and Human Services, NIH, FDA, HCFA, Health and Human Services 2 (includes Health and Human Services, NIH, FDA, and HCFA), Housing and Urban Development, Interior, Justice, DEA, Justice2 (includes Justice and DEA), Labor, State, Transportation, FAA, NHSTA, Transportation2 (includes Transportation, FAA, and NHTSA), Treasury, IRS, Treasury2 (includes Treasury and IRS), Veterans Affairs (as department), OMB, USTR, Veterans Affairs (before cabinet level), executive (includes OMB, USTR, and Veterans Affairs before it was a department), AID, CIA, EPA, FEMA, GSA, NASA, SBA, SSA, and USIA. Because of overlap among some of the variables, care was taken when deciding which variables to include in any particular analysis.

[116] The budget variable reflects federal government outlays by agencies. I mostly obtained this information from http://w3.access.gpo.gov/usbudget/fy2001/pdf/hist.pdf. For agencies not included in the GPO web summaries (AID, CIA, USTR, OMB, Air Force, Army, Navy, NIH, FDA, DEA, NHTSA, FAA, IRS, USIA) I used figures for actual (not estimated) total outlays (net outlays when provided) from the relevant Budget of the United States Government. I used "on-budget" figures for the Social Security Administration. For secretaries and under secretaries of Defense and the Comptroller of Defense, I used the sum of all military and civil outlays. For assistant secretaries (who were assigned military areas), I used

4. Political Variables

The ten-year period of data includes officials who started under Presidents Carter, Reagan and Bush.[117] To reflect the nominating President, I created several dummy variables: start date under President Carter (CARTER),[118] start date in Reagan's first term (REAGAN1),[119] start date in Reagan's second term (REAGAN2)[120] and start date under President Bush (BUSH).[121] I also created a series of variables to reflect when in a President's term the appointee began serving: first year (FIRST),[122] second year (SECOND),[123] third year (THIRD),[124] or fourth year (FOURTH).[125]

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only military outlays. For secretaries and undersecretaries of the services, I took the sum of active personnel outlays and maintenance/operations outlays for the particular branch (combining Marine Corps with the Navy); I did not include outlays for reserves or procurement. Figures are not adjusted for inflation.

[117] A handful of individuals were nominated by Carter but continued serving in Reagan's administration.

[118] This variable takes a value of 1 if the start date began before 1981.

[119] This variable takes a value of 1 if the start date was between 1981 and 1984.

[120] This variable takes a value of 1 if the start date was between 1985 and 1988.

[121] This variable takes a value of 1 if the start date was in or after 1989.

[122] This variable takes a value of 1 if the start date was in 1977, 1981, 1985 or 1989.

[123] This variable takes a value of 1 if the start date was in 1978, 1982, 1986 or 1990.

To reflect the partisan control of Congress, I defined political variables to reflect the relative weight of Republicans and Democrats in the House (HOUSE) and Senate (SENATE).[126] In the 1986 election, the Senate changed from Republican to Democratic control. I created a dummy variable to reflect appointees who started under a Democratic-controlled Senate (OPPSENATE).[127]

5. Biographical Variables

Using a variety of sources (including Who's Who in America, Public Papers of the President, Biographical Directory of the United States Executive Branch 1774-1989,[128] Westlaw and Lexis searches of major newspapers, and popular web-based search engines), I collected standard biographical

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[124] This variable takes a value of 1 if the start date was in 1979, 1983, 1987 or 1991.

[125] This variable takes a value of 1 if the start date was in 1980, 1984 or 1988.

[126] Each variable is defined by the difference between the total number of Republicans and the total number of Democrats, which is then divided by the total number of Republicans and Democrats. All numbers are taken from the year the individual started her appointment and do not reflect any registered Independents. A positive value indicates Republican control; a negative value indicates Democratic control. An alternative would be to use various estimates of median ideology in a particular legislative chamber.

[127] This variable takes a value of 1 if the start date was in or after 1987.

[128] Sobel (1990).

information, including AGE,[129] EDUCATION,[130] GENDER[131] of all appointees (some of whom appear multiple times in the data set in different positions).[132] The age of appointees in the data set ranged from 29.9 to 70.7 years; the mean was 49.6 years. Virtually all appointees had some higher education degree: 98 appointees had only an undergraduate degree, 100 had a law degree (for whom I created a dummy variable LAWYER), 53 had a doctoral degree, and 8 had a medical degree. Women comprised only 36 (10.9%) of the observations. I also noted whether an appointee was living in

[129] This variable represents the age of the appointee on the first day of her tenure. I calculated the number of days from a set date to the first day of tenure and the number of days from that same set date to the appointee's birthday; I then divided the difference by 365.25.

[130] This variable takes the following values: 0 if no college degree, 1 if undergraduate degree, 2 if masters degree, 3 if law degree, 4 if doctoral degree (Ph.D., Ed.D. or Sc.D.), and 5 if M.D. Any joint degree with law is counted as a law degree, except that a joint degree with a M.D. is counted as a medical degree. Any joint degree with medicine is counted as a medical degree.

[131] If the appointee is female, the dummy variable equals 1.

[132] Some sources of information were more reliable than others. Sometimes, I had to use age information from several sources to pinpoint a date of birth (usually to the month). I am unsure about certain information I found for the following set of appointees: Joseph C. Wheeler (AID) (birthdate, education); Richard J. Kerr (CIA) (birthdate); Clyde O. Glaister (Defense) (education); J. Lynn Helms (FAA) (education); Gerard Scannell (Labor) (birthdate); Michael Cardenas (SBA) (birthdate); Gwendolyn King (SSA) (birthdate); R.T. McNamar (Treasury) (birthdate); Julius L. Katz (USTR) (birthdate); Rufus H. Yerxa (USTR) (birthdate). Best estimates were used.

the metropolitan Washington D.C. area before being confirmed (DC).[133] Of the 330 observations, 204 (61.8%) were living in the D.C. area prior to being named to a particular position.

I also collected career history for all the appointees, including their jobs immediately before and after their appointment, PREJOB and POSTJOB.[134] Some individuals leave one executive position to take a different political appointment or civil service job. The dummy variable FEDMOVE indicates whether an individual in one position moved to another executive branch

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[133] If the appointee was living in the Washington, D.C. area (D.C., Virginia or Maryland), the dummy variable equals one.

[134] These variables take on the following values: 0 if retired, 1 if federal executive branch service, 2 if national or state political position, 3 if state or local government (non-legislative) service, 4 if at think tank, educational institution or hospital (as a doctor), 5 if private sector employment (including trade associations and consulting work for the government), 6 if other (such as a federal judge), 7 if death or illness, 8 if criminal trial or prison. If an individual held both a state political position and performed private work, she is coded as 2. The post-employment variable thus does not reflect whether the subsequent position was a "promotion" (for example, Under Secretary to Secretary) or "demotion" (Administrator at a large agency to a Commissioner at a much smaller agency). Information about post-appointment employment is not provided in a central place (unlike information about employment preceding appointment, which is usually described in the Public Papers of the President when a nomination is announced). Most information was collected through extensive searches of news databases and biographies provided in Who's Who. I am unsure about certain information for the following set of appointees: Jay F. Morris (AID) (post job); George F. Orr (Air Force) (post job); Lawrence Garrett (Navy) (post job); James F. Goodrich (Navy) (post job); James Daniel Howard (Navy) (post job); James Abdnor (SBA) (post job); Walter Stoessel (State) (post job). Best estimates were used.

position upon leaving the first position.[135] In the data, 49 individuals moved from one federal position to another federal position. I also created dummy variables for individuals with any substantial previous political or civil service executive branch experience (FEDEXP),[136] individuals whose job before appointment was a political or civil service position in the executive branch (PREPUBLIC),[137] individuals whose job before appointment was in national or state legislative politics (PASTPOL),[138] individuals whose job before appointment was in the private sector (PREPRIVATE),[139] individuals who worked in federal or state government (in any branch) or education before appointment and who went to the private sector after their appointment (CLIMBER),[140] individuals who worked in federal or state government (in any

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[135] This variable takes a value of 1 if POSTJOB=1.

[136] I did not count military service as previous federal executive branch service. I also did not count advisory councils to the President that did not require full-time work.

[137] This variable takes a value of 1 if PREJOB=1.

[138] This variable includes individuals for whom PREJOB is coded 2 (individuals who were politicians (for example, a member of Congress) and individuals who worked for politicians (for example, counsel to a Senate committee)).

[139] This variable takes a value of 1 if PREJOB=5.

[140] This variable takes a value of 1 if PREJOB=1,2,3,4, or 6 and if POSTJOB=5.

branch) or education before and after appointment (PUBLIC),[141] and individuals who worked in the private sector before and after appointment (PRIVATE).[142]

After the "Operation Ill Wind" investigations,[143] Congress strengthened statutory provisions governing private employment after government service. The new provisions took effect July 16, 1989 but were subsequently suspended from December 1, 1989 through November 30, 1990. Any appointee who started after July 1989 at least faced some possibility of increased future employment restrictions. The dummy variable REVDOOR[144] indicates whether an appointee started after the new law was initially implemented.

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[141] This variable takes a value of 1 if PREJOB=1,2,3,4, or 6 and if POSTJOB=1,2,3,4, or 6.

[142] This variable takes a value of 1 if PREJOB=5 and POSTJOB=5.

[143] The government conducted a sting operation on procurement practices, which resulted in the indictment of government employees including a former Assistant Secretary of the Navy, consultants, and contractors. Roberts (1992, 370-71).

[144] This variable takes a value of 1 if the start date was on or after July 16, 1989.

Table 1.7: Descriptive Statistics

VARIABLE	MEAN	STD. DEV.
TENURE	881.5909	588.4202
CENSOR	.3848	.4873
TOTALHEARING	15.8394	17.1884
TOTALHOUSE	8.5758	9.3126
TOTALSENATE	6.9364	8.0571
TOTALJOINT	.2242	.9635
TOTALCOMM	1.212E-02	.1096
OVERSIGHT	4.2212	5.8985
APPROPRIATION	5.2970	7.0824
OVERHOUSE	2.6758	3.8150
OVERSENATE	1.5212	2.4842
OVERJOINT	2.121E-02	.1640
OVERCOMM	3.030E-03	5.505E-02
APPHOUSE	2.9212	4.0953
APPSENATE	2.3758	3.2595
HEARRATE	1.7043	1.3471
OVERRATE	.4751	.5770
APPRATE	.5375	.5146
HOUSERATE	.9364	.7455
SENATERATE	.7426	.6852
HSERTE*SENRTE	1.0529	1.6310
INDHEAD	8.788E-02	.2835
INDASST	6.061E-02	.2390
SECRETARY	.1485	.3561
DEPSEC	.1727	.3786
UNDERSEC	6.970E-02	.2550
DEPUNDSEC	.2424	.4292
ASSTAREA	.2606	.4396
SUBCABHEAD	.1333	.3405
SUBCABASST	6.667E-02	.2498
EXECUTIVE	8.485E-02	.2791
CABINET	.6121	.4880
SUBCABINET	.1545	.3620
INDAGENCY	.1485	.3561
BUDGET	39153.6018	70937.2567
CARTER	9.091E-03	9.506E-02
REAGAN1	.3909	.4887
REAGAN2	.3061	.4616
BUSH	.2939	.4563
OPPSENATE	.4273	.4954
FIRST	.5394	.4992
SECOND	.1727	.3786
THIRD	.1818	.3863
FOURTH	.1061	.3084

Table 1.7 (Continued)

VARIABLE	MEAN	STD. DEV.
HOUSE	-.1719	4.108E-02
SENATE	-1.6485E-03	8.690E-02
AGE	49.6360	9.2199
EDUCATION	2.3697	1.1785
GENDER	.1091	.3122
LAWYER	.3030	.4603
DC	.6182	.4866
PREJOB	2.7636	1.8131
POSTJOB	3.8818	1.8238
FEDMOVE	.2061	.4051
FEDEXP	.6545	.4762
PREPRIVATE	.3242	.4688
PREPUBLIC	.4394	.4971
PASTPOL	9.697E-02	.2964
CLIMBER	.3818	.4866
POSTPRIV	.5758	.4950
PUBLIC	.2606	.4396
PRIVATE	.1909	.3936
REVDOOR	.1485	.3561
AGRICULTURE	3.636E-02	.1875
COMMERCE	6.061E-02	.2390
COMMERC2	8.788E-02	.2835
NIST	6.061E-03	7.773E-02
CENSUS	9.091E-03	9.506E-02
NOAA	1.212E-02	.1096
DEFENSE	6.061E-02	.2390
DEFENSE2	.1152	.3197
ARMY	1.515E-02	.1223
NAVY	2.121E-02	.1443
AIRFORCE	1.818E-02	.1338
EDUCATION	9.091E-02	.2879
ENERGY	4.242E-02	.2019
HEALTH	3.030E-02	.1717
HEALTH2	4.848E-02	.2151
FDA	6.061E-03	7.773E-02
NIH	6.061E-03	7.773E-02
HCFA	6.061E-03	7.773E-02
HOUSING	3.939E-02	.1948
INTERIOR	2.424E-02	.1540
JUSTICE	5.455E-02	.2274
JUSTICE2	6.667E-02	.2498
DEA	1.212E-02	.1096
LABOR	6.061E-02	.2390
STATE	3.636E-02	.1875

Table 1.7 (Continued)

VARIABLE	MEAN	STD. DEV.
TRANSPORTATION	2.424E-02	.1540
TRANSPORT2	5.758E-02	.2333
FAA	2.424E-02	.1540
NHTSA	9.091E-03	9.506E-02
TREASURY	4.848E-02	.2151
TREASURY2	5.758E-02	.2333
IRS	9.091E-03	9.506E-02
VETAFFAIRS	2.424E-02	.1540
OMB	2.424E-02	.1540
USTR	3.939E-02	.1948
AID	1.818E-02	.1338
CIA	1.818E-02	.1338
EPA	2.424E-02	.1540
FEMA	1.515E-02	.1223
GSA	9.091E-03	9.506E-02
NASA	2.121E-02	.1443
SBA	1.515E-02	.1223
SSA	9.091E-03	9.506E-02
USIA	1.818E-02	.1338

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Auditing Politics or Political Auditing?

> GAO takes a professional, objective, fact-based, nonpartisan, nonideological, fair, and balanced approach to all of its activities. Integrity is the foundation of reputation, and GAO's approach to its work ensures both.
>
> —General Accounting Office, *1999 Accountability Report*

> In the past ten years, the General Accounting Office has entered into a very comfortable arrangement with Democrats in Congress. A congressional watchdog has become a Democratic lapdog.
>
> —Edward McFadden, "There's No Accounting for Congress," *The American Spectator*, 1992

Since 1921, the General Accounting Office (GAO), the watchdog agency for Congress, has been a player in congressional, executive, and bureaucratic politics. The GAO is neither an uncontroversial provider of information nor a simple accountant of unambiguous financial statements. Often subject to scathing attacks by administrative agency officials and members of Congress who contest its conclusions, the GAO researches, culls, and synthesizes stances on a multitude of issues—many of which are inherently partisan in nature—on its own initiative and at the request of congressional committees and individual members of Congress. Under President George Herbert Walker Bush's tenure, critics of the GAO perceived the congressional agency to advocate for a Canadian-style health care system as well as for

increased taxes to ameliorate the deficit.[1] When the Republicans gained control of Congress in 1994, the GAO faced a 25 percent budget cut that pared its personnel roster from approximately 5000 to 3500 by 1996.[2] This "punishment" raises the question: Does the GAO choose to audit policy programs as a neutral watchdog for waste or as a political auditor that advances its own or others' policy objectives?

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[1] Johnson (1996). In my interviews with GAO officials in September 1997, several individuals stressed that no GAO product explicitly called for universal health care or increased taxes; yet, because these options were favorably considered in reports, legislators and others perceived them as recommendations by the GAO. For example, in its report on the Canadian health care system, the GAO concluded, "[s]ome elements of the Canadian system are worthy of consideration in a reformed U.S. system . . . These might include Canada's universal access, uniform payment system and expenditure controls." Kuntz (1991a). In the 1988 *Transition Reports*, the GAO stated, "Additional revenues are probably an unavoidable part of any realistic strategy for reducing the deficit." Kuntz (1991a).

[2] I heard several explanations during my 1997 interviews for this budget cut. The Acting Comptroller General at the time, James Hinchman, stated that there was substantial interest in making significant cuts in the cost of the legislative branch and that the GAO was part of that reduction in Fiscal Years 1995 and 1996. He did not mention any political motivation of legislators. The Office of Technology Assessment was also dismantled at this time; yet, the Congressional Budget Office received boosts to its budget. An Issue Area Director posited that the 1994 turnover in congressional membership made the GAO an unknown entity, unable to prove its worth before cuts were enacted. Yet, an Assistant Comptroller General and other top officials attributed the budget cut to the *perceived* Democratic bias of past studies. One Issue Area Director lamented, "[i]t is awfully hard to be an honest broker between parties who genuinely hate each other."

In this essay I examine theoretically the relationship between a legislature and its monitors (such as the GAO) of a bureaucracy when the participants may not share identical incentives and when the monitors must choose among various opportunities for oversight. I also analyze how these monitors operate in a partisan world, where party control can shift in each election cycle. Monitors must consider how neutrality or political bias, or the perceptions of either, will play given their own interests and the objectives of their principals. I analyze how institutional arrangements can structure, optimally and perversely, bureaucratic monitors' incentives. How will auditors act when they are placed in a partisan context—if they are concerned only with identifying any bureaucratic slack or if they have policy preferences of their own?

By focusing on the choice of what should be investigated in constructing a political economy model of auditing policy programs,[3] this work departs from an extensive literature in economics and political science on auditing, but draws upon reputation models from game theory and macroeconomic theory. In models of firm behavior (Fellingham and Newman (1985), Khalil (1997), Laffont and Tirole (1993)), owners or regulators pay an auditor to oversee workers' effort in order to minimize workers' desire to engage in cost-padding

[3] Wilson (1983) calls for research on modeling how an auditor chooses "between enhancing its reputation among investors and catering to clients [owners of firms]."

practices. Testing or auditing functions to ameliorate the asymmetry in information between owners/regulators and workers (Nalebuff and Scharfstein (1987)). Some of these models (Baron and Besanko (1984), Khalil (1997)) assume the auditor is a perfect agent of the regulator and, thus, does not try to extract side payments from the workers. Other models do not make the same simplifying assumption, instead allowing high payoffs to shirking to permit the possibility of collusion between workers and a utility-maximizing auditor (Antle (1982 & 1984), Baiman et al. (1987), Kofman and Lawarree (1993 & 1996), Tirole (1986)). Auditors in political models are typically less sophisticated than those in economic models of firm workers that contemplate the possibility of collusion. In Banks (1989) and Banks and Weingast (1992), an auditor investigates at the whim of a legislature, but the auditor's objectives are not developed. In Bendor et al. (1987), monitoring by an outside agent is assumed always to assist Congress.[4] These economic and political models described above analyze the threat of auditing a single firm or agency; consequently, their theoretical focus is often (at least in the economics literature) on the possibility of collusion between a monitor and a firm's or an agency's workers. Although

[4] Even though Kofman and Lawarree (1993) treat auditors as potentially corruptible, they cite the GAO as an example of an "external" auditor who does not collude with particular interests.

the possibility of collusion between an auditor and agency bureaucrats exists,[5] I concentrate instead on an auditor's choice of projects.

If a legislature is uncertain about an auditor's true preferences, the auditor's choices may signal information about her type. Industrial organization models (e.g., the chain-store game) of Kreps and Wilson (1982) and Milgrom and Roberts (1982) analyze how uncertainty about one player's goals permit "reputation" effects to structure equilibrium play. Maintaining a reputation for future surprises can be both necessary and costly in equilibrium. This idea has been applied in a variety of contexts. Barro (1986) examines the actions of a monetary policymaker whose type ("good" or "bad") is uncertain. A "bad" central banker can mask her type by choosing zero inflation, in the hope that she later can take advantage of incorrect expectations. Brandenburger and Polak (1996) analyze how managers may make decisions based on market "prejudices" and not on their better information. Benabou and Laroque (1992) consider how a sender of noisy information can repeatedly deceive the receiver of the information. Morris (2001) analyzes how informed experts will reveal information to decision-makers when the experts care about their reputation.

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[5] Laffont and Tirole (1990, 24). One could also conceive of fire alarm oversight models such as Epstein and O'Halloran (1995) as allowing interest groups (potential auditors) to be "bought off" with policy modifications by an administrative agency.

Using a principal-agent model of bureaucratic oversight, I consider how auditors might build and use their reputations in selecting investigations. In the first section, I outline a simple two period game between an auditor (who is a Democrat, a Republican, or nonpartisan) who chooses a Republican or Democratic project (each of which may be high or low waste) to investigate in each period and a legislature, which can fire the auditor after seeing the auditor's choice in the first period. In the second section, I analyze the game with a nonpartisan legislature. If there are symmetric priors on an auditor being a Democrat or a Republican, the legislature can use a credible firing rule that creates only socially optimal incentives. If building a reputation is cheap enough, partisan auditors will choose to investigate high waste projects affiliated with their own parties. If an auditor is more likely to be a Democrat than a Republican, the legislature has credible firing rules that may generate socially optimal as well as socially perverse incentives for an auditor who wants to profit from her reputation in the second period. Nonpartisan auditors may ignore high waste Republican projects for low waste Democratic projects in the first period to prevent being perceived as a Democrat. Democratic auditors, depending on their utility functions, may simply switch from attacking a Republican project with low waste to investigating a Democratic project with low waste in the first period or they may also switch from attacking a low waste Republican project to investigating a high waste Democratic project. I extend

this analysis by including a cost to firing the auditor, which allows players to mix strategies in equilibrium.

In the third section, I incorporate an election between the two periods to determine the partisan affiliation of the legislature. With a partisan principal, the auditor may build a partisan reputation in the first period. Auditing politics, even for the nonpartisan auditor, may become political auditing. According to the model, the more evenly balanced the electoral chances of the parties, the less political auditing will occur. Though simple, the model shows how an auditor and a legislature interact strategically. Because the auditor decides which policy programs to evaluate, such decisions signal revealing information to the legislature about the auditor's objectives. If the legislature can fire its agent and if the agent's reputation or job security affects her utility, the auditor will be careful about what projects she chooses to oversee. In the fourth section, I present some stylized facts to support this basic model. In the fifth and final section, I summarize the results and their application to institutional structures for bureaucratic oversight. All proofs are provided in Appendix 2.A.

I. Model

I develop a simple two period model between an auditor (a Democrat, a Republican, or nonpartisan) and a legislature, where only the auditor knows her

type and where the legislature can fire the auditor after observing her project choice in the first period.[6]

A. Timing

The timing of the model works as follows:

Period One

1. The legislature hires an auditor.

2. With probability α, the auditor is partisan and favors either the Democrats (with probability λ) or the Republicans (with probability $\alpha - \lambda$). With probability $(1 - \alpha)$, the auditor is nonpartisan.[7]

3. All projects generate either high waste (H) or low waste (L). Ex ante, both the legislature and the auditor know that it is equally likely that a given project will create high or low waste.

4. The auditor learns the actual amounts of waste for a Republican and a Democratic project, $w_{1,R}$ and $w_{1,D}$ where $w_{1,\cdot} \in \{H, L\}$. The legislature, however, does not know the level of waste for the two projects.[8]

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[6] This timing structure is typical in the game theory literature on reputation. In the first period, an agent can create a reputation that she can use to her advantage in the second period. For a related example, see Morris (2001).

[7] Other than the distinction between partisan and nonpartisan, auditors are alike. In other words, all nonpartisan auditors are of the same quality.

[8] The model requires only that an auditor possess more information about the projects' waste than the legislature. Imagine that an auditor employs issue specialists who have good information about various projects. The auditor then chooses which project to investigate and report on formally.

5. The auditor chooses to investigate one project, either the Republican program or the Democratic program, and produces a report for the legislature identifying the level of waste for that project, either $w_{1,R}$ or $w_{1,D}$. The legislature requires this report to confirm the waste of a project.[9]

Period Two

1. The legislature decides whether to fire or rehire the original auditor. If it fires the auditor, it hires a new auditor. With probability α, this new auditor is partisan and favors either the Democrats (with probability λ) or the Republicans (with probability $\alpha - \lambda$). With probability $(1 - \alpha)$, the new auditor is nonpartisan.[10]

2. All projects generate either high waste (H) or low waste (L). Ex ante, both the legislature and the auditor know that it is equally likely that a given project will create high or low waste.

3. The auditor learns the actual amounts of waste for a Republican and a Democratic project, $w_{2,R}$ and $w_{2,D}$ where $w_{2,*} \in \{H, L\}$. The legislature, however, does not know the level of waste for the two projects.

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[9] The model assumes that the auditor provides truthful reports to the legislature. Imagine that the reports must contain evidence to support the level of waste reported. The auditor's discretion derives from the choice of projects, not the reporting of waste. If the auditor can lie about the level of waste, the legislature receives far less information and consequently exercises less control over the auditor's choices. Talk is not always cheap when the auditor can lie about the level of waste, however. If the auditor must accurately convey the partisan affiliation of the program, some information is conveyed.

[10] The game ends after the second period, even if a new auditor is hired. If each auditor faces a one period trial period before a rehiring decision, the length of the game becomes endogenous and could conceivably continue forever. I restrict the game to two periods to concentrate on particular issues.

4. The auditor chooses to investigate one project, either the Republican program or the Democratic program, and produces a report for the legislature identifying the level of waste for that project, either $w_{2,R}$ or $w_{2,D}$. The legislature requires this report to confirm the waste of a project.

5. Game ends.

This sequence of events is illustrated more simply below:

time →

The model focuses on the selection of a project to audit. The auditor faces in each period one of the following choices:[11]

Probability of Choice	Democratic Project	Republican Project
.25	H	H
.25	H	L
.25	L	H
.25	L	L

Because there is no mechanism for the auditor to convey credibly the level of waste other than by producing a report, the legislature learns the waste only of

[11] The waste of a project is either high (H) or low (L). The assumption could be changed to analyze how the distribution of waste (e.g., high waste projects may be more prevalent than low waste projects; high waste Republican projects may be more prevalent than high waste Democratic projects) affects the choices of auditors and the firing rule of the legislature. In particular, it would be interesting to examine the tradeoff between asymmetry in the distribution of waste and asymmetry in the affiliation of the partisan auditor in equilibrium.

the project selected by the auditor, who reports the level of waste honestly. Any report, whether it identifies low or high waste, hurts the program on which it focuses. Investigations require time of bureaucratic administrators and the reports such investigations generate provide ammunition for program opponents. Imagine that any given project can generate no waste, low waste, or high waste. There is some mechanism—fire alarms pulled by interest groups for example—to present only projects that generate waste to the auditor. Consequently, even though it is equally likely that any given project before the auditor has high or low waste, an agency running a project will not pleased with a report showing low waste. If it had generated no waste, the project would not even be up for investigation.[12]

B. Players' Objectives

The players, depending on their type, have different objectives. Nonpartisan players—whether auditors or a legislature—wish to maximize the amount of waste from investigations. Partisan players wish to maximize the amount of waste from projects affiliated with the opposing party, and to minimize the amount of reported waste from projects linked to their own party. For example, imagine the two project choices are an Air Force fighter

[12] Susan Rose-Ackerman questioned the assumption that a low level report necessarily hurts the agency or political party with which it is affiliated. See Appendix 2.B for an alternative model.

plane (Republican project) and an education program for welfare recipients (Democratic project). In this stylized example, a Republican auditor prefers to attack the welfare policy initiative; a Democratic auditor prefers to investigate the fighter plane program.

I use a basic utility maximization framework. Players do not discount expected utility from the second period. A nonpartisan player's utility is

(1) $$U_{NonPartisan} = U(w_{i\in\{Dem,Rep\}}).$$

where U is an increasing, non-negative function in waste w of the selected project. A partisan player's utility from a given project choice is

(2) $$U_{i\in\{Dem,Rep\}} = U(w_{-i}) \text{ if choose opposing party's project}$$
$$= \gamma U(w_i) \text{ if choose own party's project}$$

where U is an increasing, non-negative function in waste w of the selected project and $\gamma \leq 0$. For example, a Democratic auditor receives non-negative utility from investigating a Republican project, and non-positive utility from selecting a Democratic project.

1. Legislature's Utility Maximization

A legislature that does not face an election after the first period wants to maximize its utility over the two periods:

$$U(w_{1,a}) + U(w_{2,b})$$

where a and b are projects chosen by the auditor and U is defined in (1) if the legislature is nonpartisan and where U is defined in (2) if the legislature is partisan. A legislature fires the original auditor when the expected utility from this auditor in the second period is less than the expected utility from hiring a new auditor. A legislature updates its probabilities on the first period auditor's type using Bayes' Rule:

$$P(\text{partisan} \mid \text{project choice}) = \frac{P(\text{project choice} \mid \text{partisan})}{P(\text{project choice} \mid \text{partisan}) + P(\text{project choice} \mid \text{nonpartisan})}$$

Thus, a nonpartisan legislature would fire an auditor with an updated probability of being partisan that is greater than α because in expectation such a legislature anticipates a new auditor will be partisan with probability α. For a legislature that does face an election after the first period, I assume that the auditor's choice in the first period does not affect the election's outcome. A newly elected legislature will, however, consider the auditor's choice when deciding whether to fire or retain the auditor for the second period. This is considered in more detail in Part III.

2. Auditor's Utility Maximization

A strategic auditor hired in the beginning of the first period wants to maximize utility from her choice of evaluation projects:

$$\max_{a,b} U(w_{1,a}) + \beta U(w_{2,b})$$

where β is the probability that the auditor is rehired. If the auditor is nonpartisan, U is defined in (1) above. This auditor does not benefit from waste discovered by a different auditor in the second period.[13] Imagine that a

[13] If a nonpartisan auditor receives utility from the level of waste reported in both periods (whether or not she is rehired for the second period), the auditor will always choose a high waste project if one is available. Because the game ends after the second period, auditors are not constrained in their second period project choices. If the nonpartisan auditor is rehired, she will maximize the amount of waste reported over the two periods. If she is fired, with probability (1-α), the new auditor will be nonpartisan and will act to maximize the level of waste reported in the second period (choosing a high waste project with probability ¾ and a low waste project with probability ¼), maximizing the amount of waste reported over the two periods. If she is fired, with probability α, the new auditor will be partisan and will choose a high waste project with probability ½ and a low waste project with probability ½. The only relevant utility comparison is the following: The first period auditor must weigh choosing a high waste project and being fired (where in the second period, there may be a partisan auditor who will choose a low waste project of the opposing party if the other choice is a high waste project of her own party) against choosing a low waste project and being rehired. The first option gives the nonpartisan auditor the following utility:

$$U(H) + \frac{\alpha}{2}U(H) + \frac{\alpha}{2}U(L) + (1-\alpha)\frac{3}{4}U(H) + (1-\alpha)\frac{1}{4}U(L)$$

The second option gives the nonpartisan auditor the following utility:

nonpartisan auditor receives credit and accolades for any waste she reports. Even an efficiency-minded auditor does not want to lose her job to allow another auditor to claim credit for waste reduction. If the auditor is partisan, U is defined in (2) above. Like the nonpartisan auditor, a partisan auditor gets utility only from her own project choices. A partisan auditor cares not only about attacking a particular party but also about the credit she can take for such attacks. Partisan and nonpartisan auditors who are not strategic consider only first period utility.

Because the game concludes at the end of the second period, an auditor hired in the beginning of the second period (or the rehired auditor in the second period) acts in an obvious manner. A nonpartisan auditor selects a project based solely on expected waste. A partisan auditor investigates the project sponsored by the opposite party.

$$U(L)+\frac{3}{4}U(H)+\frac{1}{4}U(L)$$

The first option provides more utility to the nonpartisan auditor for any legitimate value of α.

3. Utility Comparisons of Strategic Auditors

Because a nonpartisan auditor receives equal utility from projects with the same amount of waste, there is only one interesting utility comparison a strategic nonpartisan auditor must consider—whether she should select a low waste project instead of a high waste project in the first period so that she is not fired and able to cut a high waste project with probability ¾ in the second period. This comparison depends on the assumption that the legislature will fire the auditor if she selects a high waste project in the first period and will rehire her otherwise. She should select a low waste project in this case only if $U(L) + \frac{3}{4} U(H) + \frac{1}{4} U(L) \geq U(H)$ which simplifies to $5U(L) \geq U(H)$. I label this the **Partisan Imitator** condition. This condition becomes relevant when there are asymmetric priors on the partisanship of the auditor or when the legislature is partisan.

Because of symmetric priors on the distribution of the waste, a partisan auditor in the second period expects to see a high waste project of the opposing party with probability ½ and a low waste project of the opposing party with probability ½. A partisan auditor potentially must consider four utility comparisons (corresponding to the four possible project choice pairs) where she must weigh choosing to investigate the other party's project (her desired option) in the first period and being fired against choosing to investigate her party's project (her undesired option) and being rehired. When

faced with two low waste projects, she chooses her party's low waste project if she is fired only if she selects otherwise and if, by substituting Equation (2) into her utility function, $\gamma U(L) + \frac{1}{2} U(H) + \frac{1}{2} U(L) \geq U(L)$ which simplifies to $(2\gamma-1)U(L) \geq -U(H)$. I label this the **Take Small Hit Instead of Give Small Hit** condition.

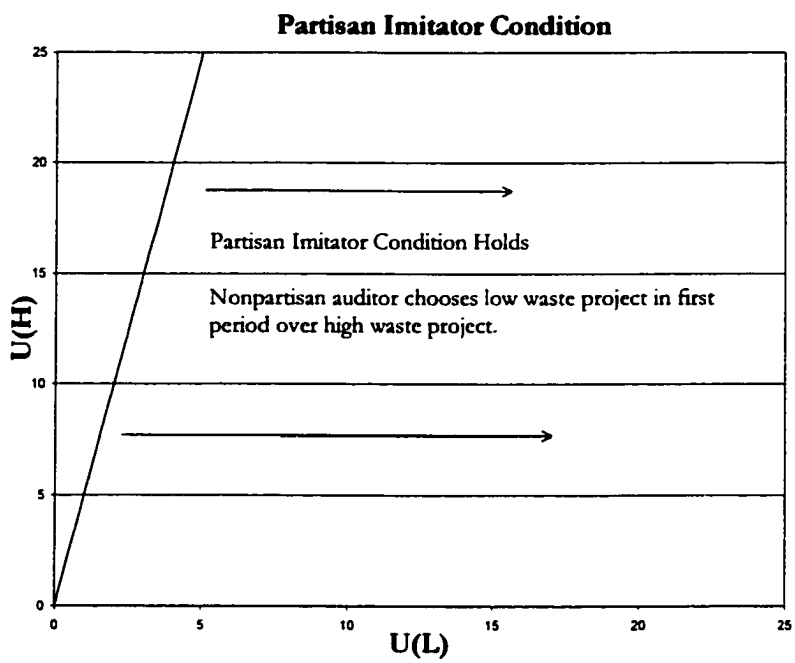
When faced with a low waste project of the other party that she wants to investigate and a high waste project of her party that she does not want to evaluate, she chooses her least favorite project if she is fired only if she selects otherwise and if $\gamma U(H) + \frac{1}{2} U(H) + \frac{1}{2} U(L) \geq U(L)$ which simplifies to $(2\gamma+1)U(H) \geq U(L)$. I label this the **Take Big Hit Instead of Give Small Hit** condition, which is a subset of the **Take Small Hit Instead of Give Small Hit** condition.

The other two utility comparisons never result in a partisan auditor investigating her own party's project in the first period. First, when faced with two high waste projects, a partisan auditor would choose her party's project if she is fired only if she selects otherwise and if $\gamma U(H) + \frac{1}{2} U(H) + \frac{1}{2} U(L) \geq U(H)$ which simplifies to $(1-2\gamma)U(H) \leq U(L)$. Second, when faced with a high waste project of the other party that she wants to investigate and a low waste project of her party that she does not want to evaluate, a partisan auditor would select her party's project if she is fired only if she selects otherwise and if $\gamma U(L) + \frac{1}{2} U(H) + \frac{1}{2} U(L) \geq U(H)$ which simplifies to $(2\gamma+1)U(L) \geq U(H)$.

Because U is an increasing function of waste, a partisan auditor will never choose to investigate her party's project in these two situations. If U were a nondecreasing function of waste, the last two conditions would hold only trivially, when U(H)=U(L)=0 or when $\gamma=0$ *and* U(H)=U(L).

The first three conditions can be illustrated as follows. When the **Partisan Imitator** condition holds, a nonpartisan auditor chooses a low waste project over a high waste project. In Figure 2.1 below, the condition holds to the right of the line.

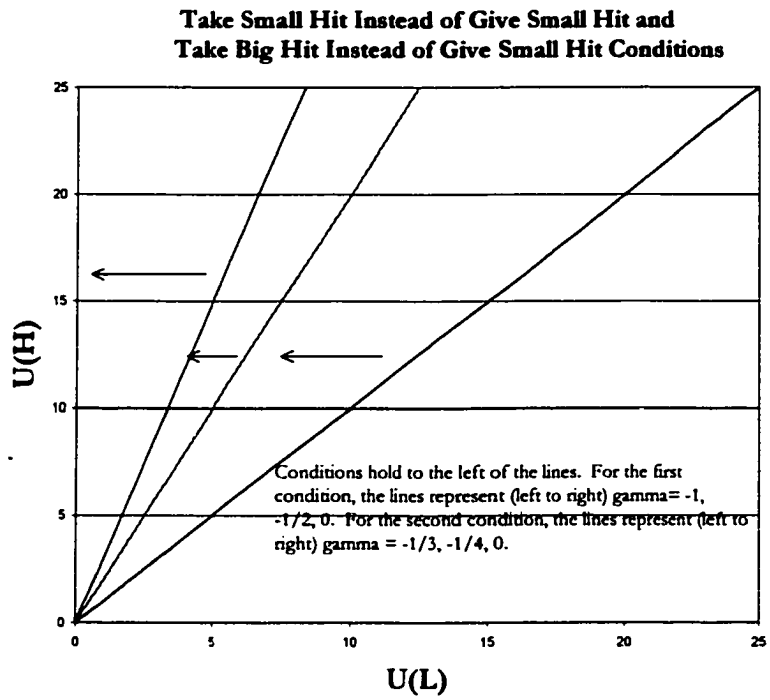
Figure 2.1



When the **Take Small Hit Instead of Give Small Hit** condition holds, a partisan auditor chooses her party's project with low waste over the opposing

party's project with low waste. In the diagram below, the condition holds to the left of the line. As γ decreases, the relevant line rotates to the left (γ=-1, - ½, 0, moving left to right over the three lines). When the **Take Big Hit Instead of Give Small Hit** condition holds, a partisan auditor chooses her party's project with high waste over the opposing party's project with low waste. Due to the restrictions on the utility function U, it cannot hold if $\gamma \leq$ - ½. In Figure 2.2 below, the condition holds to the left of the line where γ=-1/3, - ¼, 0, moving left to right over the three lines.

Figure 2.2



II. Equilibrium Play

From this simple framework, I determine how the legislature's mechanism for discipline can obtain efficient work from an auditor and how the mechanism and reputation structure can lead to socially sub-optimal outcomes. I focus on what projects non-strategic auditors (who consider only waste or party affiliation of the project choice)[14] and strategic auditors (who consider how their project choice affects the rehiring decision) select in the first period. I assume initially that the legislature is nonpartisan and updates its beliefs as to whether the original auditor is partisan before making its rehiring decision; such a legislature fires an auditor if its updated probability of the auditor being partisan is greater than α. I consider cases where it is equally likely that a partisan auditor is a Democrat or a Republican, and where the prior distribution on party affiliation is asymmetric. In these various cases, I determine when partisan auditors will imitate nonpartisan auditors by choosing a high waste project to avoid being fired and when nonpartisan auditors will decline to investigate a high waste project to avoid looking like a partisan auditor. I consider a partisan legislature in Part III.

[14] In other words, non-strategic auditors completely discount the second period when making their first period selection.

A. Non-Strategic Auditors

I start with the simplest cases to show how a nonpartisan legislature can do better with an equilibrium firing rule than without it, even if the rule allows the legislature to fire nonpartisan auditors and rehire partisan auditors in some cases. Assume the first period auditor is non-strategic and that a partisan auditor is equally likely to be affiliated with the Democrats or Republicans. A partisan auditor investigates the project affiliated with the party she dislikes. A nonpartisan auditor evaluates the project with the highest waste, randomizing between the two choices if they have the same amount of waste. A nonpartisan legislature updates its probabilities of the first period auditor's type using Bayes' Rule.

Proposition One:

Assuming a non-strategic auditor and symmetric priors on the party affiliation of a partisan auditor, a nonpartisan legislature rehires the original auditor if she chooses a high waste project in the first period and fires the auditor otherwise.

An auditor's first period decision thus need only provide weakly positive information about her type for the legislature to rehire her. I next consider asymmetric priors on the party affiliation of a non-strategic partisan auditor. With a partisan auditor either more likely to be a Democrat or a Republican, a nonpartisan legislature can have more diverse firing rules in equilibrium.

Proposition Two:

Let (1- α) be the probability that an auditor is nonpartisan. Assuming a non-strategic auditor and asymmetric priors on the party affiliation of a partisan auditor where λ is the probability that the auditor is a Democrat and $\alpha - \lambda$ is the probability that the auditor is a Republican, a nonpartisan legislature rehires the original auditor in all of the following cases where the conditions are satisfied and fires the auditor otherwise:

If auditor chooses a high waste Republican project in the first period and if $\lambda \leq \frac{3}{4}\alpha$;

If auditor chooses a high waste Democratic project in the first period and if $\lambda \geq \frac{1}{4}\alpha$;

If auditor chooses a low waste Republican project in the first period and if $\lambda \leq \frac{1}{4}\alpha$;

If auditor chooses a low waste Democratic project in the first period and if $\lambda \geq \frac{3}{4}\alpha$.

Consider the following example. Assume that $\alpha = \frac{1}{2}$ and $\lambda = 2/5$. In other words, there is a 50 percent chance the auditor is partisan; if the auditor is partisan, there is an 80 percent chance she is a Democrat. Only the second and fourth conditions of Proposition Two can hold. The legislature will fire an auditor if she chooses a Republican project of low or high waste in the first period and rehire the auditor otherwise. A non-strategic Democratic auditor always chooses a Republican project in the first period and will subsequently be fired. A non-strategic Republican auditor always selects a Democratic project in the first period and will subsequently be rehired. A non-strategic nonpartisan auditor randomizes between projects of equal waste (remember,

the auditor is not considering the impact on the rehiring decision) and chooses a project of high waste over a project with low waste. With probability ⅜, the nonpartisan auditor chooses a Republican project with high waste and with probability ⅛, the nonpartisan auditor investigates a Republican project with low waste. So with probability ½, the nonpartisan auditor will be fired.

It is important to remember the firing rules described in the first two propositions do not change the actions of any auditors because non-strategic auditors have a short-term horizon and consider only utility from the first period. The firing rules create Class I and Class II errors for the legislature—eliminating nonpartisan auditors and retaining partisan auditors. With symmetric priors on the party affiliation of a partisan auditor, a non-strategic nonpartisan auditor is fired with probability ¼ (the probability that she faces two low waste projects in the first period) and a non-strategic partisan auditor is fired with probability ½ (the probability that she will face a low waste project of the opposing party). With asymmetric priors where $\lambda \geq \frac{3}{4}\alpha$ and non-strategic auditors, a nonpartisan legislature rehires the original auditor only if it sees a Democratic project reported in the first period. A non-strategic Democratic auditor is always fired; a non-strategic Republican auditor is always rehired; and a non-strategic nonpartisan auditor, who randomizes over projects with equal waste, is fired with probability ½. With asymmetric priors where

$\lambda \leq \frac{1}{4}\alpha$ and non-strategic auditors, the opposite occurs because a nonpartisan legislature will only rehire an auditor if it sees a Republican project in the first period. With asymmetric priors where $\frac{1}{4}\alpha < \lambda < \frac{3}{4}\alpha$ and non-strategic auditors, the legislature rehires the original auditor only if it sees a high waste project reported in the first period. As in the symmetric priors case, a non-strategic partisan auditor is fired with probability ½ and a non-strategic nonpartisan auditor is fired with probability ¼.

Despite the potential errors generated by the rules, the legislature increases its utility by adopting the firing rules specified in the first two propositions. In the second period, the legislature receives the following utility:

$$\frac{\alpha}{2}U(H)+\frac{\alpha}{2}U(L)+\frac{3(1-\alpha)}{4}U(H)+\frac{(1-\alpha)}{4}U(L)$$

which simplifies to

$$\frac{3}{4}U(H)+\frac{1}{4}U(L)+\frac{\alpha}{4}[U(L)-U(H)]$$

Because U(H) > U(L), the last term decreases as α increases. When its updated belief of the partisanship of the auditor is less than α, the legislature keeps the auditor under its firing rule, yielding greater utility in the second period. When its updated belief of the auditor's bias is greater than α, the legislature fires the auditor, yielding greater expected utility in the second period.

B. Strategic Auditors with Symmetric Priors

Multiple period games allow for sophisticated players to establish reputations. In this section, I consider auditors who make their first period selection knowing that it influences the legislature's decision on whether to rehire them. With symmetric priors on the party affiliation of a partisan auditor, a strategic nonpartisan auditor will never forgo a high waste project if one is available because selecting a project based on party affiliation will only encourage a partisan reputation. Moreover, with a nonpartisan legislature making any rehiring decisions, selecting high waste projects maximizes a nonpartisan auditor's chances for being rehired. A firing rule may, however, change the incentives of a strategic partisan auditor by making her select the project affiliated with her favored party. It may be worth pretending to have different preferences if the auditor can cash in on her reputation built in the initial period in the final period.

A strategic partisan auditor mimics a non-strategic nonpartisan auditor only if the legislature fires auditors who choose low waste projects and if her expected utility maximization warrants such sacrifice in the first period to keep her job for the second period.

Proposition Three:

Assuming a strategic auditor and symmetric priors on the party affiliation of a partisan auditor, the following set of strategies is an equilibrium: A nonpartisan legislature never rehires an auditor who chooses a low waste project in the first period; a nonpartisan auditor chooses the project with the highest waste in the first period, randomizing between projects of equal waste; and if the Take Big Hit Instead of Give Small Hit condition holds, a partisan auditor in the first period mimics a nonpartisan auditor by choosing a high waste project of her own party over a low waste project of the opposing party and chooses the opposing party's project in all other cases.

As the loss in utility from taking projects affiliated with her own party increases (as γ decreases), a partisan auditor is less likely to imitate a nonpartisan monitor. At $\gamma = 0$, the **Take Big Hit Instead of Give Small Hit** condition holds for all feasible values of U(H) and U(L), so the partisan auditor always mimics a non-strategic nonpartisan auditor. At $\gamma = 0$, the "big hit" is in some sense painless; the only cost to establishing a false reputation is the loss of utility from not attacking a low waste project of the opposing party in the first period. But the auditor does not mind because she is rehired and with probability ½ can attack a high waste project of the opposing party in the second period. If $\gamma \leq -½$, a partisan auditor never sacrifices utility in the first period. At this point, the cost to establishing a false reputation becomes too much to bear.

Like the firing rule in Proposition One, the firing rule here creates two types of error, keeping partisan auditors with probability ¾ (if the **Take Big**

Hit Instead of Give Small Hit condition holds) or with probability ½ (if the condition does not hold), and firing nonpartisan auditors with probability ¼. But the legislature has higher expected utility with the firing rule than without it. In the first period, if there is no firing rule, auditors will act non-strategically. With the firing rule, auditors will act identically to non-strategic auditors or will choose more high waste projects (if the **Take Big Hit Instead of Give Small Hit** condition holds). Thus, if the condition holds, the legislature expects to gain more utility with the firing rule than without it in the first period. With the firing rule, the probability that the second period auditor is partisan is less than or equal to α. Without the firing rule, the probability is equal to α. As this probability decreases, expected utility in the second period increases. If the **Take Big Hit Instead of Give Small Hit** condition does not hold, the legislature expects the same amount of utility with the firing rule and without it. Thus, the legislature expects to gain as much or more utility in the second period with the firing rule than without it. So the legislature can establish a credible mechanism for disciplining auditors that creates socially optimal incentives. So long as building a reputation is cheap enough, partisan auditors are more likely to choose high waste projects in the first period with the firing rule than if they did not face a rehiring decision in between the two periods.

C. Strategic Auditors with Asymmetric Priors

Up to now I have assumed that a partisan auditor is equally likely to be a Democrat or a Republican. If a partisan auditor is more likely to be affiliated with one party than another, nonpartisan auditors may have the incentive to choose projects based on party affiliation (to appear nonpartisan) rather than on amount of waste. Without loss of generality, assume a partisan auditor is more likely to be a Democrat (probability λ where $\lambda > \alpha/2$) than a Republican (probability $\alpha - \lambda$). Ex ante, a project is still equally likely to be high or low waste. Since partisan auditors wish to select projects affiliated with the party they dislike, a partisan auditor is more likely to want to attack Republican projects than Democratic projects. A nonpartisan auditor realizes that a nonpartisan legislature will be skeptical when it witnesses a Republican project choice in the first period, and she may select a Democratic project with low waste to prevent such an association.

Proposition Four:

Assuming asymmetric priors on the party affiliation of a partisan auditor where $\lambda > \alpha/2$ is the probability that the auditor is a Democrat and $\alpha - \lambda$ is the probability that the auditor is a Republican and where the firing rule is optimal for the legislature, the following are pure strategy equilibria:

(1) Assume further that the Partisan Imitator condition holds. A nonpartisan legislature fires the original auditor if she chooses a Republican project with low or high waste in the first period and rehires the auditor otherwise. A nonpartisan auditor and a Republican auditor always select the Democratic project in the first period. If both the Take Small Hit Instead of Give Small Hit and Take Big Hit Instead of Give Small Hit conditions hold, a Democratic auditor selects Republican projects with high waste if available, and Democratic projects otherwise in the first period. If the Take Small Hit Instead of Give Small Hit condition holds but the Take Big Hit Instead of Give Small Hit condition does not, a Democratic auditor selects a Democratic project only if faced with two projects with low waste, and chooses Republican projects otherwise in the first period. If neither condition holds, a Democratic auditor always selects the Republican project in the first period.

(2) Assume further that $\lambda \leq \frac{3}{4}\alpha$. A nonpartisan legislature fires the original auditor if she chooses a Republican project with low or high waste or a Democratic project with low waste in the first period and rehires the auditor otherwise. A nonpartisan auditor always selects the Democratic project with high waste if available in the first period and chooses the project with the highest waste otherwise, randomizing if both projects have low waste. A Republican auditor always selects the Democratic project in the first period. If the Take Big Hit Instead of Give Small Hit condition holds, a Democratic auditor selects a Democratic project with high waste only if the alternative is a Republican project with low waste, and chooses Republican projects otherwise in the first period. If the condition does not hold, a Democratic auditor always selects the Republican project in the first period.

Take the following example as an illustration of the first equilibrium. Assume U(L)=2, U(H)=5, $\gamma = -\frac{1}{4}$, $\alpha = \frac{1}{2}$, and $\lambda = 2/5$. With these parameters, all three sacrificing or reputation-building conditions hold. A nonpartisan or

Republican auditor will always choose the Democratic project in the first period and will be rehired. The Republican auditor's expected utility over the two periods is 2[½(2) + ½(5)]=7. The nonpartisan auditor's expected utility over the two periods is ½(2) + ½(5) + ¾(5) + ¼(2)=7.75. A Democratic auditor will make the strategic choices marked by an asterisk in the following table in the first period and will be fired in the first and third scenarios:

Probability	Democratic Project	Republican Project
.25	H	H*
.25	H*	L
.25	L	H*
.25	L*	L

Her expected utility over the two periods is ¼(5) + ¼(2) - ½(¼)(2) + ½(½)(5) + ½(½)(2) =3.25. A nonpartisan legislature receives utility in the first period equal to $(\alpha - \lambda + 1 - \alpha)(½)5 + (\alpha - \lambda + 1 - \alpha)(½)2 + \lambda\,(¾)5 + \lambda\,(¼)2 = 3.8$ and receives utility in the second period equal to

$(\alpha - \lambda)(½)5 + (\alpha - \lambda)(½)2 + (1- \alpha)(¾)5 + (1- \alpha)(¼)2 + (½)\,\lambda(½)5 + (½)\,\lambda\,(½)2 + (½)\,\lambda\,\alpha\,(½)5 + (½)\,\lambda\,\alpha\,(½)2 + (½)\,\lambda(1- \alpha)(¾)5 + (½)\,\lambda(1- \alpha)(¼)2 = 3.95$

where the first four terms represent the expected utility from Republican and nonpartisan auditors who are always rehired, the next two terms represent the expected utility from a Democratic auditor who is rehired with probability ½, and the last set of terms represents the expected utility from a new auditor. Without the firing rule, auditors would always choose their favorite projects in

both periods, and the legislature would yield utility over the two periods equal to $2[(\frac{1}{2})(\alpha)5 + (\frac{1}{2})(\alpha)2 + (1-\alpha)(\frac{3}{4})5 + (1-\alpha)(\frac{1}{4})2] = 7.75$. The firing rule thus yields the same amount of utility for the legislature as the absence of a firing rule.

With asymmetric priors on the party affiliation of partisan auditors (so that Democrats are more likely than Republicans) and strategic auditors, the legislature's rehiring rules can structure socially optimal as well as socially perverse incentives. Nonpartisan auditors may ignore high waste Republican projects for low waste Democratic projects in the first period to prevent being perceived as a Democrat. Democratic auditors, depending on their utility functions, may simply switch from attacking a Republican project with low waste to investigating a Democratic project with low waste or they may also switch from attacking a low waste Republican project to investigating a high waste Democratic project—all to be able to attack a high waste Republican project with probability ½ in the second period. It is also possible that Democratic auditors may act non-strategically if neither sacrificing condition holds. Republican auditors do not alter their behavior from the non-strategic case.

Under the first equilibrium, if the three sacrificing conditions hold, the legislature's firing rule creates perverse incentives for a strategic nonpartisan auditor and optimal incentives for a strategic Democratic auditor. The

legislature will never fire a nonpartisan or Republican auditor and will fire a Democratic auditor with probability ½. For the legislature to be better off in this equilibrium than with no firing rule, the sum of its utility over the two periods, (3) and (4), with the firing rule must be at least as great as the sum of its utility over the two periods, (5), without the rule. The legislature must take into account how its firing rule impacts what kind of auditor it will have in the second period.

(3) $$(1-\lambda)(\frac{1}{2})U(H)+(1-\lambda)(\frac{1}{2})U(L)+\lambda(\frac{3}{4})U(H)+\lambda(\frac{1}{4})U(L)$$

(4) $$(1-\alpha)(\frac{3}{4})U(H)+(1-\alpha)(\frac{1}{4})U(L)+(\alpha-\lambda)(\frac{1}{2})U(H)+(\alpha-\lambda)(\frac{1}{2})U(L)+$$
$$\frac{\lambda}{2}(\frac{1}{2})U(H)+\frac{\lambda}{2}(\frac{1}{2})U(L)+\frac{\lambda}{2}(\frac{\alpha}{2})U(H)+\frac{\lambda}{2}(\frac{\alpha}{2})U(L)+\frac{3\lambda}{2}(\frac{1-\alpha}{4})U(H)+$$
$$\frac{\lambda}{2}(\frac{1-\alpha}{4})U(L)$$

(5) $$2[(1-\alpha)(\frac{3}{4})U(H)+(1-\alpha)(\frac{1}{4})U(L)+\alpha(\frac{1}{2})U(H)+\alpha(\frac{1}{2})U(L)]$$

For the firing rule to be better than no firing rule, this reduces to

$$[U(H)-U(L)][3\lambda+2\alpha-\alpha\lambda-2]\geq 0$$

The first term is positive by assumption. So if the second term is positive, the inequality holds.

Under the second equilibrium, the firing rule never creates perverse incentives for a nonpartisan auditor. If the **Take Big Hit Instead of Give Small Hit** condition holds, the legislature's firing rule creates only optimal incentives for the Democratic auditor. But the legislature often does not rehire the auditor under this equilibrium—firing a nonpartisan auditor and a Republican auditor with probability ½ and firing a Democratic auditor with probability ¾. For the legislature to be better off in this equilibrium than with no firing rule, the sum of its utility over the two periods, (6) and (7), with the firing rule must be at least as great as the sum of its utility over the two periods, (8), without the rule. Like above, the legislature must take into account how its firing rule impacts what kind of auditor it will have in the second period.

(6) $$(\alpha-\lambda)(\frac{1}{2})U(H)+(\alpha-\lambda)(\frac{1}{2})U(L)+(1-\alpha+\lambda)(\frac{3}{4})U(H)+(1-\alpha+\lambda)(\frac{1}{4})U(L)$$

(7) $$(1-\alpha)(\frac{3}{8})U(H)+(1-\alpha)(\frac{1}{8})U(L)+(\alpha-\lambda)(\frac{1}{4})U(H)+(\alpha-\lambda)(\frac{1}{4})U(L)+\frac{\lambda}{8}U(H)+\frac{\lambda}{8}U(L)+(\frac{2+\lambda}{4})[(\frac{\alpha}{2})U(H)+(\frac{\alpha}{2})U(L)+3(\frac{1-\alpha}{4})U(H)+(\frac{1-\alpha}{4})U(L)]$$

(8) $$2[(1-\alpha)(\frac{3}{4})U(H)+(1-\alpha)(\frac{1}{4})U(L)+\alpha(\frac{1}{2})U(H)+\alpha(\frac{1}{2})U(L)]$$

For the firing rule to be better than no firing rule, this reduces to

$$[U(H)-U(L)][5\lambda-\alpha\lambda]\geq 0$$

which always holds since $\alpha < 1$.

These equilibria are not unique. For example, the following is another pure strategy equilibrium if the **Partisan Imitator** condition but neither of the other two sacrificing conditions holds: A nonpartisan legislature fires the original auditor if she chooses a Democratic project with low or high waste in the first period. A partisan auditor selects her favored project in the first period. A nonpartisan auditor chooses the Republican project when both options are of low waste or of high waste, or when the Republican project is of high waste and the Democratic project is of low waste, but she mimics a non-strategic Democratic auditor by choosing the Republican project with low waste over a Democratic project with high waste. If only a Republican auditor chooses a Democratic project, it is rational for a legislature to fire the auditor if she selects a Democratic project. Because both Democratic and nonpartisan auditors choose a Republican project with high waste with probability ½ and a Republican project with low waste with probability ½, the legislature does not

think it more likely that the auditor is partisan than its ex ante beliefs when it sees a Republican project. If Democratic and Republican auditors do not share symmetric utility functions, it is possible for one type of partisan auditor to be willing to sacrifice utility in the first period and for the other to refuse to participate in such sacrifice, creating other equilibria with asymmetric priors.

D. Costs to Firing

Until this point, there has been no cost to the legislature for firing the original auditor and hiring a new auditor for the second period. Without a cost, the legislature fires an auditor if its updated belief that the auditor is partisan is greater than its prior belief. One way to consider a cost to firing is to make it an additional increase in probability k needed to justify firing the first period auditor and hiring a new auditor, who is expected to be partisan with probability α. The actual cost of firing is derived from the relevant utility functions and then placed on a probability metric. In other words, a nonpartisan legislature that faces a cost to firing the original auditor rehires the first period auditor only if $P(\text{partisan} \mid \text{first period project choice}) \leq \alpha + k$. If k is high enough, an auditor can choose a project in the first period without facing any repercussions from the legislature.

With a cost to firing, it is possible for both a partisan auditor and a nonpartisan legislature to mix strategies in equilibrium. A partisan auditor must be indifferent between imitating and not imitating a non-strategic nonpartisan

auditor when the choice is between a low waste project of the opposing party and a high waste project of her party. The legislature must also be indifferent between firing and not firing when it sees a low waste report in the first period.

Proposition Five:

Let p be the probability that a partisan auditor does not imitate a non-strategic nonpartisan auditor when she faces a choice between a high waste project of her own party and a low waste project of the opposing party. Let q be the probability that a nonpartisan legislature fires the original auditor when it sees a low waste project in the first period. Assuming a strategic auditor and symmetric priors on the party affiliation of a partisan auditor, a mixed strategy equilibrium exists if $\alpha+k<1$, if α is greater than or less than both $(\frac{1}{2})[-k+1(+/-)(k^2-2k+2)^{1/2}]$ and if $\gamma \geq [U(L)-U(H)]/2U(H)$. In the equilibrium, a nonpartisan auditor always selects the project with the highest waste (randomizing between projects of equal waste); a partisan auditor chooses a low waste project of the opposing party over a high waste project of her party with probability $p=k/[\alpha(1-\alpha-k)]$ in the first period and chooses the reverse with probability $(1-p)$; a partisan auditor chooses the opposing party's project in all other cases; and the legislatures fires an auditor with probability $q=[2U(L)-2\gamma U(H)]/[U(H)+U(L)]$ if it sees a low waste project in the first period.

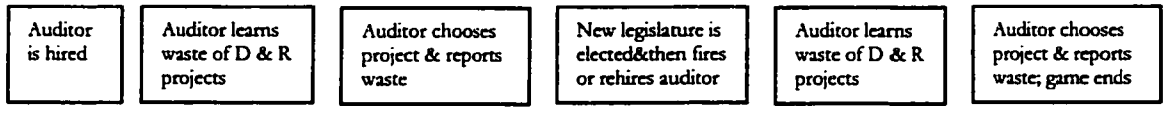
Consider an example. Let $\alpha = \frac{1}{4}$ and $k = \frac{1}{8}$. Let U(H)=4, U(L)=2, and $\gamma = -1/5$. The following is a mixed strategy equilibrium: A partisan auditor chooses a high waste project of her party over a low waste project of the opposing party with probability $(1-p)=1-(k/[\alpha(1-\alpha-k)])=1/5$; a nonpartisan legislature fires the auditor with probability

$q= [2U(L)-2\gamma U(H)]/[U(H)+U(L)]=14/15$ if it sees a low waste project in the first period.

As the cost to firing the original auditor increases, a partisan auditor is less likely to imitate a non-strategic nonpartisan auditor in the first period, and overall, more low waste projects will be selected in the two periods. In the American political system, these costs can take various forms. First, there are administrative costs to finding new monitors of policy programs. If supply is scarce, such costs are higher. Second, there are potential political costs. Initial auditors have the capability of building alliances, making it harder to punish or fire them. Once institutions are established, it can be exceedingly difficult to transform or replace them.

III. Partisan Legislature

In the preceding analysis, I assumed that the legislature is nonpartisan, trying only to maximize the amount of waste investigated by the auditor without regard to its political affiliation. Legislatures are, however, partisan entities that face regular elections. Using the same timing of the model analyzed above, I now add an election for the legislature before the rehiring decision. The sequence of events can be illustrated simply as



Let p be the probability that a Democratic legislature is elected and (1-p) be the probability that a Republican legislature is elected. This probability is exogenous and is unaffected by the choice of project in the first period. A partisan legislature's utility function for the second period is specified in (2); its party affiliation affects its firing rules and how partisan and nonpartisan auditors select projects in the first period.

Let α' and λ' be the updated beliefs of the legislature as to whether the original auditor is partisan and whether the original auditor is a Democrat, respectively. Since the game ends after the second project choice, auditors will choose their favorite projects (either by waste or party affiliation, depending on the auditor's type) in the second period. Without loss of generality, I first consider a Democratic legislature. Such a legislature rehires the first period auditor only if its expected utility for the second period is at least as great as what it expects to receive if it selects another auditor:

$$(1-\alpha')\frac{3}{4}U(R=H \text{ or } D=H)+(1-\alpha')\frac{1}{4}U(R=L \text{ or } D=L)+\lambda'\frac{1}{2}U(R=H)+\lambda'\frac{1}{2}U(R=L)+$$
$$(\alpha'-\lambda')\frac{1}{2}U(D=H)+(\alpha'-\lambda')\frac{1}{2}U(D=L)\geq$$

$$(1-\alpha)\frac{3}{4}U(R=H \text{ or } D=H)+(1-\alpha)\frac{1}{4}U(R=L \text{ or } D=L)+\lambda\frac{1}{2}U(R=H)+\lambda\frac{1}{2}U(R=L)+$$
$$(\alpha-\lambda)\frac{1}{2}U(D=H)+(\alpha-\lambda)\frac{1}{2}U(D=L)$$

where the utility for a Republican project equals $U(w_{\cdot,R})$ and for a Democratic project equals $\gamma U(w_{\cdot,D})$. Presuming that the nonpartisan auditor randomizes equally between projects of equal waste in the second period, this condition reduces to:

$$-3\alpha'U(H)+\alpha'\gamma U(H)-\alpha'U(L)+3\alpha'\gamma U(L)-4\lambda'\gamma U(H)-4\lambda'\gamma U(L)+4\lambda'U(H)+$$
$$4\lambda'U(L) \quad \geq$$
$$-3\alpha U(H)+\alpha\gamma U(H)-\alpha U(L)+3\alpha\gamma U(L)-4\lambda\gamma U(H)-4\lambda\gamma U(L)+4\lambda U(H)+4\lambda U(L)$$

This condition can be reduced, with some simplifying assumptions, to an extremely intuitive comparison. First, assume symmetric priors on the party affiliation of a partisan auditor ($\lambda=\alpha/2$) so that a partisan auditor is equally likely to be a Democrat or a Republican. Second, assume that $\gamma=-1$ so that the above utility condition for a Democratic legislature simplifies to

$$\lambda' U(H) + \lambda' U(L) - \frac{\alpha'}{2} U(H) - \frac{\alpha'}{2} U(L) \geq \lambda U(H) + \lambda U(L) - \frac{\alpha}{2} U(H) - \frac{\alpha}{2} U(L)$$

Because the right hand side is equal to zero (since by assumption $\lambda=\alpha/2$), the legislature's utility condition then collapses to

$$(\lambda' - \frac{\alpha'}{2})[U(H) + U(L)] \geq 0$$

Since utility is non-negative and increasing in waste, a Democratic legislature rehires the original auditor if $\lambda' \geq \alpha'/2$; similarly, a Republican legislature rehires the auditor if $\lambda' \leq \alpha'/2$. In other words, a Democratic legislature rehires the auditor so long as she is more likely to be a Democrat than a Republican.

If all auditors behave non-strategically, a Democratic legislature will fire an auditor if she selects a Republican project in the first period and a Republican legislature will fire an auditor if she selects a Democratic project in the first period. With probability p (the probability a Democratic legislature is elected), a Republican auditor is fired; with probability (1-p) (the probability a Republican legislature is elected), a Democratic auditor is fired. Assuming that a nonpartisan auditor randomizes between projects of equal waste and chooses the high waste project otherwise, any legislature (Republican or Democratic) expects to fire a nonpartisan auditor with probability ½.

Strategic auditors take into account how their first period choice affects the rehiring decision. When γ=-1, the partisan affiliation of the legislature changes the **Partisan Imitator** and **Take Small Hit Instead of Give Small Hit** conditions discussed earlier as follows. (The remaining sacrificing or reputation-building conditions do not hold with a partisan legislature and γ =-1.) Like before, a nonpartisan auditor must consider whether she should select a low waste project instead of a high waste project in the first period so that she is not fired and able to cut a high waste project with probability ¾ in the second period. This comparison depends on the probability that the legislature will approve of her project choice. Presuming that a legislature fires the auditor if it sees a project affiliated with its own party in the first period, a nonpartisan auditor should select a low waste Democratic project over a high waste Republican project only if

$$U(L) + (1-p)(¾)U(H) + (1-p)(¼)U(L) \geq U(H) + (p)(¾)U(H) + (p)(¼)U(L)$$

which simplifies to

$$\frac{5U(L)-U(H)}{6U(H)+2U(L)} \geq p$$

I label this the **Republican Partisan Imitator** condition. A nonpartisan auditor should select a low waste Republican project over a high waste Democratic project only if

$U(L) + (p)(¾)U(H) + (p)(¼)U(L) \geq U(H) + (1\text{-}p)(¾)U(H) + (1\text{-}p)(¼)U(L)$

which simplifies to

$$p \geq \frac{7U(H)-3U(L)}{6U(H)+2U(L)}$$

I label this the **Democratic Partisan Imitator** condition. As p increases, the **Republican Partisan Imitator** condition is less likely to hold and the **Democratic Partisan Imitator** condition is more likely to hold. As p approaches ½, the nonpartisan auditor will act as if she faces a nonpartisan legislature.

Presuming that a legislature fires the auditor if it sees a project affiliated with its own party in the first period, a Republican auditor chooses her party's low waste project when faced with two low waste projects only if

$\gamma U(L) + (p)(½)U(H) + (p)(½)U(L) \geq U(L) + (1\text{-}p)(½)U(H) + (1\text{-}p)(½)U(L)$

which simplifies to

$$p \geq \frac{5U(L)+U(H)}{2U(H)+2U(L)}$$

when γ=-1. I label this the **Republican Take Small Hit Instead of Give Small Hit** condition. This condition holds only for certain values of U(L) and (UH), where $½ < p \leq 1$. In the same situation, a Democratic auditor chooses her party's low waste project when faced with two low waste projects only if,

$\gamma U(L) + (1-p)(\frac{1}{2})U(H) + (1-p)(\frac{1}{2})U(L) \geq U(L) + (p)(\frac{1}{2})U(H) + (p)(\frac{1}{2})U(L)$

which simplifies to

$$p \leq \frac{-3U(L)+U(H)}{2U(H)+2U(L)}$$

when γ=-1. I label this the **Democratic Take Small Hit Instead of Give Small Hit** condition. Like above, this condition holds only for certain values of U(L) and (UH), where $0 \leq p < \frac{1}{2}$.

With a guaranteed Democratic legislature (much like the control of the House of Representatives for most of the second half of the last century), the following proposition holds.

Proposition Six:

Assuming symmetric priors on the party affiliation of a partisan auditor and γ=-1, the following is an equilibrium: A legislature that is guaranteed to be Democratic (p=1) fires an auditor who chooses a Democratic project with any level of waste in the first period; a Democratic auditor always selects a Republican project in the first period; if the Democratic Partisan Imitator condition holds, a nonpartisan auditor always selects a Republican project in the first period; if the condition does not hold, a nonpartisan auditor chooses a Democratic project with high waste when the Republican project is low waste and chooses a Republican project otherwise in the first period; if the Republican Take Small Hit Instead of Give Small Hit condition holds, a Republican auditor chooses a Republican project only if both projects are of low waste and a Democratic project otherwise in the first period; and if the condition does not hold, a Republican auditor always chooses a Democratic project in the first period.

When the legislature making the rehiring decision is guaranteed to favor the Democrats, if the **Democratic Partisan Imitator** condition (which collapses to the **Partisan Imitator** condition) holds, both a nonpartisan auditor who cares only about maximizing reported waste and a Democratic auditor who cares only about attacking Republican projects behave identically; to be rehired, they always select Republican projects. The partisan legislature thus creates perverse incentives for a nonpartisan auditor in the first period. If the **Republican Take Small Hit Instead of Give Small Hit** condition (which collapses to the **Take Small Hit Instead of Give Small Hit** condition) holds, even a Republican auditor selects a Republican project when both projects have low waste. Because the principal is partisan, the auditor—the legislature's agent—may build a partisan reputation. Auditing politics, even for the nonpartisan monitor, may become political auditing.

Because the legislature's partisan affiliation is typically never guaranteed (since it faces regular elections), I incorporate uncertainty into the legislature's preferences before the rehiring decision.

Proposition Seven:

Assuming symmetric priors on the party affiliation of a partisan auditor and $\gamma = -1$, the following is an equilibrium: with probability p, the legislature making the rehiring decision will be Democratic and will fire the auditor if it sees a Democratic project in the first period; with probability $(1-p)$, the legislature will be Republican and will fire the auditor if it sees a Republican project in the first period; if $p \geq \frac{1}{2}$, a nonpartisan auditor selects a Republican project when projects have equal waste in the first period; if $p < \frac{1}{2}$, a nonpartisan auditor selects a Democratic project when projects have equal waste in the first period; if the Republican Partisan Imitator condition holds, a nonpartisan auditor selects a low waste Democratic project over a high waste Republican project and selects the high waste Republican project if the condition does not hold in the first period; if the Democratic Partisan Imitator condition holds, a nonpartisan auditor chooses a low waste Republican project over a high waste Democratic project and chooses the high waste Democratic project if the condition does not hold in the first period; if the Republican Take Small Hit Instead of Give Small Hit condition holds, a Republican auditor chooses a Republican project with low waste over a Democratic project with low waste and chooses a Democratic project in all other circumstances in the first period; if the condition does not hold, a Republican auditor always selects a Democratic project in the first period; if the Democratic Take Small Hit Instead of Give Small Hit condition holds, a Democratic auditor chooses a Democratic project with low waste over a Republican project with low waste and chooses a Republican project in all other circumstances in the first period; if the condition does not hold, a Democratic auditor always selects a Republican project in the first period.

Consider an example. Assume $\gamma = -1$ and symmetric priors on the partisanship of the auditor ($\lambda = \alpha/2$). Assume further that $U(H)=6$, $U(L)=1$, and that a Democratic legislature is elected with probability $p=1/6$. A nonpartisan auditor chooses a Democratic project when both projects have equal waste and chooses a high waste project over a low waste project since

neither **Partisan Imitator** condition holds. Because the **Democratic Take Small Hit Instead of Give Small Hit** condition holds, a Democratic auditor chooses a Democratic project with low waste over a Republican project with low waste and selects Republican projects in all other circumstances. Because the **Republican Take Small Hit Instead of Give Small Hit** condition does not hold, a Republican auditor always selects Democratic projects. In this example, although a nonpartisan and a Republican auditor do not sacrifice utility in the first period to create a false reputation, a Democratic auditor does.

As p goes to either 0 or 1, the more likely it is that one of the two **Partisan Imitator** conditions will hold and that the nonpartisan auditor will seek to develop a partisan reputation to increase her chances to cut more waste in a nonpartisan manner in the final period. Likewise, as p goes to 1, the reputation condition for Republican auditors becomes easier to meet. When $p=1$, the condition is met when $3U(L) \leq U(H)$ and when $p=3/4$, the condition is met when $7U(L) \leq U(H)$. Similarly as p goes to 0, the reputation condition for Democratic auditors becomes easier to meet. When $p=0$, the condition is met when $3U(L) \leq U(H)$ and when $p=1/4$, the condition is met when $7U(L) \leq U(H)$.

With more electoral uncertainty (as p goes to ½) partisan (as well as nonpartisan) auditors are less willing to pretend to have opposite or different biases from their true preferences. A vigorous democracy with high expected

turnover of party control in the legislature is, in most circumstances, more likely to result in better (from a social welfare perspective) auditing of policy programs than a system with a favored party.[15] The more evenly balanced the electoral chances of the parties, the less political auditing will occur.

IV. Stylized Facts

Because the GAO functions as an auditor of policy programs as an agent of Congress, we can look at how the GAO has expended its resources for investigations in light of changes in congressional majorities. The GAO collects data on all its published reports and testimony to Congress (including the type of report, subject and budgetary matter(s) involved, legal authorization cited, congressional relevance, requester information (if applicable), findings, recommendations to Congress, and recommendations to agencies).

Using this data it is possible to examine what the GAO investigates on its own initiative (in other words, when the audit is not performed pursuant to a congressional request), and what the GAO performs at the request of members of Congress. In its self-initiated work, does the GAO examine more "Democratic" projects (e.g., welfare programs) when the Republicans control

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[15] This statement is not true in every circumstance. Imagine that almost all auditors are Republican and that the **Republican Take Big Hit Instead of Give Small Hit** condition holds. If the legislature is guaranteed to be Democratic, it is likely that more high waste projects will be chosen than where the Democrats expect to make the rehiring decision with probability ½.

the House of Representatives (or the Senate) or more "Republican" projects when the Democrats are in control? In other words, does the GAO's choice of self-initiated work depend on which party controls the House of Representatives or Senate? Does the GAO target agencies by their budget size to maximize the amount of waste it can find in its self-initiated work? What factors (such as divided government, number of findings, budget size) help explain what investigations are requested by Congress and what investigations are done without a congressional request? I take up many of these questions in the third essay of my dissertation. I offer here one highly stylized observation that potentially sheds light on the model's predictions.

Concentrating only on self-initiated products (i.e., no congressionally requested work) from 1986 to 1997, when the level of self-initiated work remained relatively constant, I catalogue how many products fall into particular budget areas.[16] By simplifying these areas, one could argue plausibly that the following budget areas could be considered Republican programs: (a) national defense; (b) general science, space and technology; and (c) administration of

[16] These areas include: national defense; international affairs; general science, space and technology; energy; natural resources and the environment; agriculture; commerce and housing credit; transportation; community and regional development; education, training, employment and social services; health; income security; veterans benefits and services; administration of justice; general government; general purpose fiscal assistance; interest; allowances; undistributed offsetting receipts; and financial management and information systems.

justice. Similarly, one could also posit that the following budget areas could be considered Democratic programs: (d) community and regional development; (e) education, training, employment and social services; (f) health; and (g) income security.[17] Counts of products by these particular budget areas are presented below for calendar years 1986-1997 in Table 2.1:

[17] In 1988, when the Democrats controlled the House of Representatives and the Senate, House committee chairpersons and/or Senate committee chairpersons (who were Democrats) requested 115 investigations involving areas (a), (b) or (c) but requested only 81 investigations involving areas (d), (e), (f) or (g). In the same year, Republican ranking minority members requested only 9 investigations involving areas (a), (b) or (c) but requested 22 investigations involving areas (d), (e), (f) or (g). In 1996, when the Republicans controlled the House of Representatives and the Senate, Republican chairpersons requested 14 investigations involving areas (a), (b) or (c) but requested 60 investigations involving areas (d), (e), (f) or (g). Democratic ranking minority members requested 4 investigations involving areas (a), (b) or (c) and somewhat surprisingly requested 24 investigations involving areas (d), (e), (f) or (g). Levitt and Snyder (1995, 964 n.9) cite a study that "found that the Democratic vote percentage across districts in House elections was positively associated with welfare and public works outlays in 1978, but negatively correlated with military and agricultural outlays." But they also note another study that "found that districts represented by Democrats had more military employment in 1968 than districts represented by Republicans."

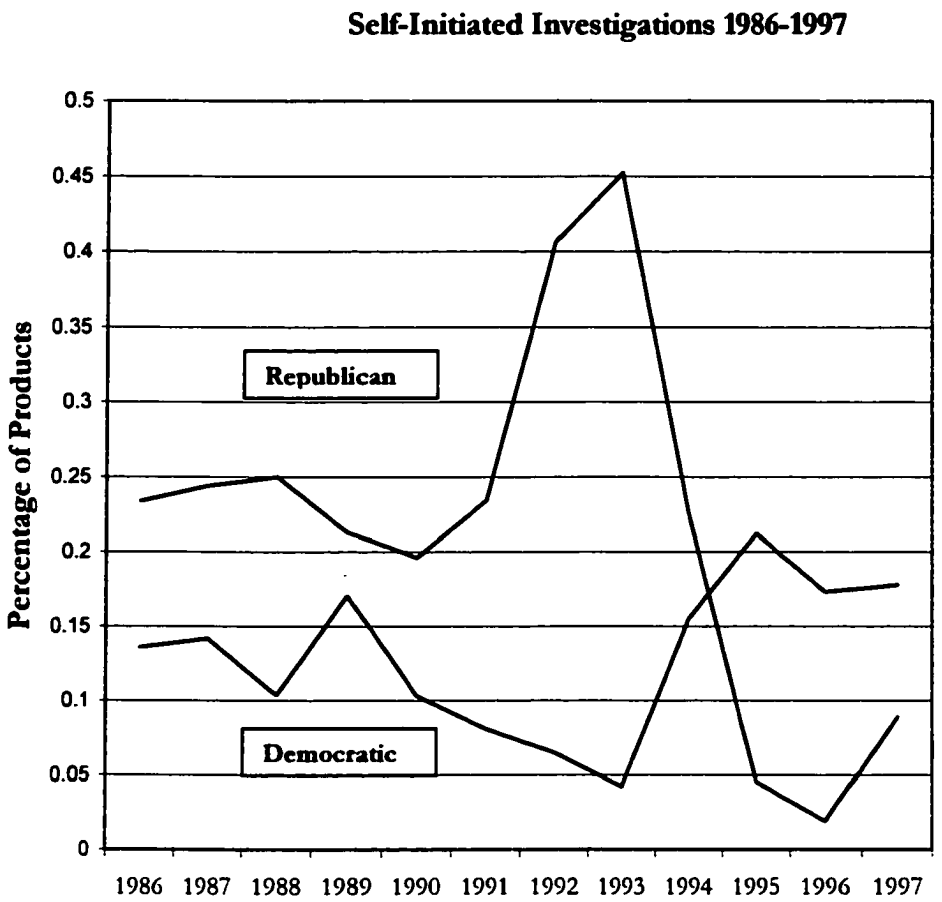
Table 2.1: Number of Self-Initiated GAO Products by Budget Category

YEAR	Defense	Science	Justice	Commun. Develop.	Education	Health	Income Security	All*
1986	41	1	1	0	5	9	11	184
1987	30	1	0	0	6	7	5	127
1988	22	3	4	1	5	5	1	116
1989	18	0	2	1	2	7	6	94
1990	16	3	0	1	0	2	7	97
1991	24	1	1	1	0	5	3	111
1992	47	3	0	3	2	2	1	123
1993	37	3	3	0	1	3	0	95
1994	16	0	0	3	0	4	4	71
1995	0	1	2	7	1	2	4	66
1996	0	1	0	5	2	1	1	52
1997	2	2	0	3	1	3	1	45

* All products with a specified budget function.

I graph the percentages of Democratic and Republican projects of all self-initiated work assigned a budget category for 1986-1997 in Figure 2.3.

Figure 2.3



I hesitate to make any definite claims for several reasons. First, this classification ignores all other budget functions. Second, the percentage of self-initiated investigations assigned a budget function is declining during this period. One alternative might be to catalogue products by their assigned issue areas. I instead offer only the most preliminary thoughts. With the Republicans in control of the House of Representatives since 1994, one notes a

decline from the early 1990s in self-initiated investigations of "Republican" programs and an increase in investigations of "Democratic" programs. This observation is consistent with the theory that the General Accounting Office selects projects that will gain it favor and budget security with Congress.[18] Though by 1997, the difference in the percentage of Republican and Democratic investigations narrowed. Perhaps the GAO perceived the Republican majorities to be more precarious. There could, of course, be entirely different and potentially more compelling explanations for these trends.

V. Conclusion

Auditors—whether in economic or political institutions—choose what to observe and report in order to advance their objectives. Monitors of the monitor can structure these choices in socially optimal or perverse ways. According to the simple model presented in this essay, partisan auditors may choose projects based on waste to obfuscate their true type, and nonpartisan auditors may choose projects based on party affiliation to prevent acquiring a

[18] It is probable that the GAO's self-initiated work is linked to what studies are congressionally requested. Perhaps, if Congress asks for a biased set of products, the GAO tries to offset this bias in its self-initiated work. In this case, however, this would mean that Congress since 1994 would request more Democratic audits and fewer Republican audits and that the GAO would devote its resources for self-initiated work in opposite proportions. It would then be all the more surprising that trends in the GAO's self-initiated products are precisely the opposite. Any solid empirical analysis will of course have to address the connection between congressionally requested and self-initiated work. I take up such an analysis in a separate essay of my dissertation.

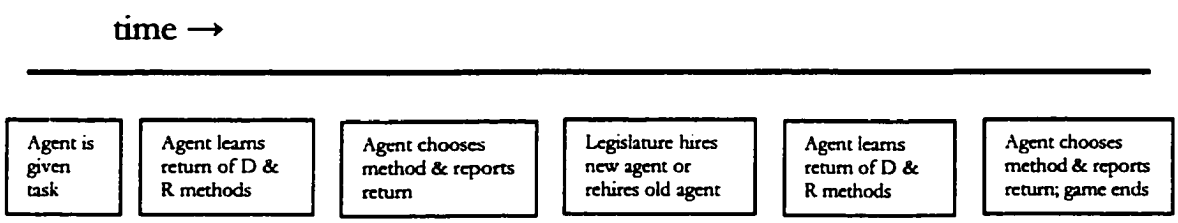
partisan reputation. Moreover, if the legislature has partisan objectives, partisan and nonpartisan auditors can act identically, despite having different utility functions. Because the auditor decides between projects, such decisions can signal revealing information to the legislature about the auditor's objectives. If the legislature can fire its agent or cut her budget and if the agent's reputation affects her utility, the auditor will be careful about what projects she chooses.

If the legislature wants to increase social welfare, it might consider hiring two auditors: one Republican and one Democrat and splitting resources between the two. As Dewatripont and Tirole (1999) suggest, advocates or competitive interest groups may produce better results than an independent investigator.[19] Though the auditors would be explicitly partisan, the complete

[19] Dewatripont and Tirole argue that an institutional system of advocates has two major advantages: "First, the advocates' rewards closely track their performance whereas nonpartisans' incentives are impaired by their pursuing several causes at one time. Second, advocacy enhances the integrity of decision making by creating strong incentives to appeal in case of an abusive decision." They also argue that nonpartisanship is more likely to be optimal only if the following two items hold: "a) either rewards (compensation, promotion) are provided by the decision maker herself, and the decision maker can build a reputation for 'fairness', so that information-based direct rewards are feasible, or inertia (which, recall, is more likely under advocacy) is very costly, *and* b) the decision maker's goal can be made sufficiently congruent with the organization's (i.e., either the decision maker is the principal or the decision maker's honesty or explicit or implicit incentives align her interests with those of the principal), and thus the integrity of decision making is not a key issue." Dewatripont and Tirole (1999, 33-34).

set of investigations may be more equally balanced and more efficient at eliminating bureaucratic waste. But it is important to remember that "institutional choices" are also "political choices."[20]

The interaction between efficiency and partisanship is not limited to stories of auditing policy programs. Although this essay focuses on the interaction between a legislature and an auditor of bureaucratic programs, the analysis can easily extend to many types of interactions between a legislature and a bureaucratic agent. Imagine that a legislature delegates policy work to an agent who has some discretion as to how to carry it out. This agent can select a relatively Republican or Democratic program, each of which can yield a high or low return. The modified sequence of events would be as follows:



Such a framework could help us understand when bureaucrats are diligent public servants, shirkers, or partisan activists. By studying institutional structures, we can acquire information on how incentives might constrain

[20] Moe (1990, 250).

bureaucratic actions in both politically and economically efficient and inefficient ways.

Appendix 2.A

Proof of Proposition One:

Using Bayes' Rule, the legislature updates as follows:

$$P(\text{partisan} \mid D = H) = P(\text{partisan} \mid R = H) = \frac{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(0)}{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(0) + (1-\alpha)(\frac{3}{8})} = \frac{2\alpha}{3-\alpha}$$

which is less than or equal to α since $\alpha \leq 1$, so the legislature should rehire the auditor if it observes a high waste investigation.

Because

$$P(\text{partisan} \mid D = L) = P(\text{partisan} \mid R = L) = \frac{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(0)}{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(0) + (1-\alpha)(\frac{1}{8})} = \frac{2\alpha}{1+\alpha}$$

is greater than α if $\alpha < 1$, the legislature should fire the auditor if it observes a low waste report. □

Proof of Proposition Two:

By definition, a non-strategic auditor chooses a project in the first period without considering the rehiring decision. These rehiring conditions follow simply from the legislature's updated beliefs and its rational benchmark to fire

the original auditor only if its updated belief on the partisanship of this auditor is greater than α:

$$P(\text{partisan} \mid R = H) = \frac{\lambda(\frac{1}{2}) + (\alpha - \lambda)(0)}{\lambda(\frac{1}{2}) + (\alpha - \lambda)(0) + (1-\alpha)(\frac{3}{8})} = \frac{4\lambda}{4\lambda + 3 - 3\alpha} \leq \alpha$$

if $\lambda \leq 3/4\ \alpha$;

$$P(\text{partisan} \mid D = H) = \frac{\lambda(0) + (\alpha - \lambda)(\frac{1}{2})}{\lambda(0) + (\alpha - \lambda)(\frac{1}{2}) + (1-\alpha)(\frac{3}{8})} = \frac{4(\alpha - \lambda)}{\alpha - 4\lambda + 3} \leq \alpha$$

if $\lambda \geq 1/4\ \alpha$;

$$P(\text{partisan} \mid R = L) = \frac{\lambda(\frac{1}{2}) + (\alpha - \lambda)(0)}{\lambda(\frac{1}{2}) + (\alpha - \lambda)(0) + (1-\alpha)(\frac{1}{8})} = \frac{4\lambda}{4\lambda + 1 - \alpha} \leq \alpha$$

if $\lambda \leq 1/4\ \alpha$;

$$P(\text{partisan} \mid D = L) = \frac{\lambda(0) + (\alpha - \lambda)(\frac{1}{2})}{\lambda(0) + (\alpha - \lambda)(\frac{1}{2}) + (1 - \alpha)(\frac{1}{8})} = \frac{4(\alpha - \lambda)}{3\alpha - 4\lambda + 1} \leq \alpha$$

if $\lambda \geq 3/4\ \alpha$.□

Proof of Proposition Three:

Lemma:

Assuming a strategic auditor and symmetric priors on the party affiliation of a partisan auditor, a nonpartisan legislature never rehires the original auditor if she chooses a low waste project in the first period.

Assume not. A strategic nonpartisan auditor receives more utility from selecting a high waste project than a low waste project in any given period. She would *consider* choosing a low waste project instead of a high waste project in the first period only if that choice would change a firing decision into a rehiring decision (and would actually choose a low waste project if the **Partisan Imitator** condition holds). Because the condition requiring a change from being fired to being rehired does not apply here, a strategic nonpartisan auditor will choose a high waste project if available in the first period. A strategic partisan auditor may decide to mimic a nonpartisan auditor and choose a high waste project when her desired project is low waste. Yet, there is no incentive for the partisan auditor to mimic in this manner. If the legislature does not fire

for low waste project choices in the first period, a partisan auditor maximizes her utility by choosing the project affiliated with the party she dislikes in both periods. The legislature's updated belief when it sees a low waste project in the first period is then greater than α. Thus, the legislature's firing rule (i.e., rehire auditor who selects a low waste project) is not rational. □

First, I show that given the specified firing rule, the auditors will make the stated project selections. Second, I show that given these project selections, the legislature's firing rule is rational. A strategic nonpartisan auditor receives more utility from selecting a high waste project than a low waste project in any given period. She would consider choosing a low waste project instead of a high waste project in the first period only if that choice would change a firing decision into a rehiring decision (and would actually choose a low waste project if the **Partisan Imitator** condition holds). Because the condition requiring a change from being fired to being rehired does not apply here, a strategic nonpartisan auditor will choose a high waste project if available in the first period. Since a nonpartisan auditor receives equal utility from projects with the same level of waste, it is rational for her to randomize between projects of equal waste in the first period. If the **Take Big Hit Instead of Give Small Hit** condition holds, a partisan auditor imitates a nonpartisan auditor in the

case described. The legislature's rule for rehiring is also rational for the following reasons: First, from the lemma, the legislature fires the original auditor if she selects a low waste (L) project. Second, if the original auditor selects a high waste (H) project if one is available in the first period, the legislature rationally rehires the auditor as its updated belief as to whether the auditor is partisan is

$$P(\text{partisan} \mid D = H) = P(\text{partisan} \mid R = H) = \frac{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(\frac{1}{4})}{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}(\frac{1}{4}) + (1-\alpha)(\frac{3}{8})} = \alpha$$

which equals its prior belief about the auditor as well as its belief that a new auditor will be partisan. □

Proof of Proposition Four:

Consider the first equilibrium. Given the conditions on the auditor's utility function, partisan and nonpartisan auditors select projects in the first period as specified. By choosing all Democratic projects, a Republican auditor is rehired and does not have to sacrifice any utility in the first period. A nonpartisan auditor is always rehired by choosing the Democratic project in the first period; she sacrifices utility in the first period when faced with a Democratic project

with low waste and a Republican project with high waste to be rehired for the second period.

If both the **Take Small Hit Instead of Give Small Hit** and the **Take Big Hit Instead of Give Small Hit** conditions hold, a strategic Democratic auditor selects a Republican project with high waste if available, for which she is fired, and chooses Democratic projects otherwise. The nonpartisan legislature's firing rule is rational given these behavioral assumptions as its updated belief about the auditor's type when it sees a Republican project with low waste can be greater than α since the event never happens and when it sees a Republican project with high waste is greater than α. The legislature updates as follows:

$$P(\text{partisan} \mid R = H) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{2})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{2}) + (1-\alpha)(0)} = 1 > \alpha$$

In the other two cases, its updated belief of the auditor's type is less than or equal to α:

$$P(\text{partisan} \mid D = L) = P(\text{partisan} \mid D = H) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(\frac{1}{4})}{(\alpha - \lambda)(\frac{1}{2}) + \lambda(\frac{1}{4}) + (1 - \alpha)(\frac{1}{2})} = \frac{2\alpha - \lambda}{2 - \lambda} \leq \alpha$$

since $\alpha \leq 1$.

If the **Take Small Hit Instead of Give Small Hit** condition holds but the **Take Big Hit Instead of Give Small Hit** condition does not, a strategic Democratic auditor selects a Democratic project only if both projects have low waste and chooses Republican projects otherwise, for which she is fired. The nonpartisan legislature's firing rule is rational given these behavioral assumptions as its updated belief about the auditor's type when it sees a Republican project is greater than α because

$$P(\text{partisan} \mid R = L) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{4})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{4}) + (1 - \alpha)(0)} = 1 > \alpha$$

and

$$P(\text{partisan} \mid R = H) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{2})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{2}) + (1 - \alpha)(0)} = 1 > \alpha$$

In the other two cases, its updated belief of the auditor's type is less than or equal to α:

$$P(\text{partisan} \mid D = L) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(\frac{1}{4})}{(\alpha - \lambda)(\frac{1}{2}) + (\frac{1}{4}) + (1-\alpha)(\frac{1}{2})} = \frac{2\alpha - \lambda}{2 - \lambda} \leq \alpha$$

since $\alpha \leq 1$ and

$$P(\text{partisan} \mid D = H) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0)}{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0) + (1-\alpha)(\frac{1}{2})} = \frac{\alpha - \lambda}{1 - \alpha} \leq \alpha$$

since $\alpha \leq 1$.

If the **Take Small Hit Instead of Give Small Hit** condition and, consequently, the **Take Big Hit Instead of Give Small Hit** condition do not hold, a partisan auditor chooses her favorite project—the project connected to the opposing party. A nonpartisan legislature wants to fire an auditor only if its updated belief that she is partisan is greater than α after the first period. The legislature updates as follows:

$$P(\text{partisan} \mid D = L) = \frac{(\alpha - \lambda)\frac{1}{2}}{(\alpha - \lambda)\frac{1}{2} + (1-\alpha)\frac{1}{2}} = \frac{\alpha - \lambda}{1 - \lambda} < \alpha$$

since $\alpha < 1$.

Because the nonpartisan auditor no longer randomizes between projects when both projects are high waste (choosing instead the Democratic project),

$$P(\text{partisan} \mid D = H) = \frac{(\alpha - \lambda)\frac{1}{2}}{(\alpha - \lambda)\frac{1}{2} + (1-\alpha)\frac{1}{2}} = \frac{\alpha - \lambda}{1 - \lambda} \leq \alpha$$

since $\alpha < 1$.

Because the nonpartisan auditor no longer randomizes between projects when both projects of low waste (choosing instead the Democratic project),

$$P(\text{partisan} \mid R = L) = \frac{\lambda(\frac{1}{2})}{\lambda(\frac{1}{2}) + (1-\alpha)0} = 1 > \alpha$$

The nonpartisan auditor will never choose a Republican project with high waste,

$$P(\text{partisan} \mid R = H) = \frac{\lambda(\frac{1}{2})}{\lambda(\frac{1}{2}) + (1-\alpha)0} = 1 > \alpha$$

From these calculations, the nonpartisan legislature should rehire the auditor when it sees a Democratic project of low or high waste, and should fire the auditor when it sees a Republican project of low or high waste.

Consider the second equilibrium. Given the conditions on the auditor's utility function, partisan and nonpartisan auditors select projects in the first period as specified. A nonpartisan auditor does not sacrifice any utility by choosing a Democratic project with high waste if available and selecting the highest waste project otherwise. She is, however, fired unless she is able to choose a Democratic project with high waste. By choosing all Democratic projects, a Republican auditor is rehired only if waste is high, but she does not have to sacrifice any utility in the first period. If the **Take Big Hit Instead of Give Small Hit** condition holds, a Democratic auditor selects a Democratic project with high waste only if the Republican project has low waste, and chooses

Republican projects otherwise, for which she is fired. If the condition does not hold, a Democratic auditor maximizes her utility by choosing the Republican project in the first period and being fired. The nonpartisan legislature's firing rule is rational given these behavioral assumptions as its updated belief about the auditor's type when it sees a Democratic project with low waste or a Republican project is greater than α. Whether or not the reputation-building condition holds,

$$P(\text{partisan} \mid D = L) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0)}{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0) + (1-\alpha)(\frac{1}{8})} = \frac{4(\alpha - \lambda)}{3\alpha - 4\lambda + 1} > \alpha$$

if $\lambda < 3/4\ \alpha$ and

$$P(\text{partisan} \mid R = H) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{2})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{2}) + (1-\alpha)(\frac{1}{4})} = \frac{2\lambda}{2\lambda + 1 - \alpha} > \alpha$$

since $\lambda > \alpha/2$.

When the **Take Big Hit Instead of Give Small Hit** condition holds,

$$P(\text{partisan} \mid R = L) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{4})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{4}) + (1-\alpha)(\frac{1}{8})} = \frac{2\lambda}{2\lambda + 1 - \alpha} > \alpha$$

since $\lambda > \alpha/2$.

When the condition does not hold,

$$P(\text{partisan} \mid R = L) = \frac{(\alpha - \lambda)(0) + \lambda(\frac{1}{2})}{(\alpha - \lambda)(0) + \lambda(\frac{1}{2}) + (1-\alpha)(\frac{1}{8})} = \frac{4\lambda}{4\lambda + 1 - \alpha} > \alpha$$

since $\lambda > \alpha/4$.

In the last case when it sees a Democratic project with high waste, the legislature rehires the auditor as its updated belief of the auditor's type is less than or equal to α. When the **Take Big Hit Instead of Give Small Hit** condition holds,

$$P(\text{partisan} \mid D = H) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(\frac{1}{4})}{(\alpha - \lambda)(\frac{1}{2}) + \lambda(\frac{1}{4}) + (1-\alpha)(\frac{1}{2})} = \frac{2\alpha - \lambda}{2 - \lambda} \leq \alpha$$

since $\alpha \leq 1$.

When the condition does not hold,

$$P(\text{partisan} \mid D = H) = \frac{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0)}{(\alpha - \lambda)(\frac{1}{2}) + \lambda(0) + (1-\alpha)(\frac{1}{2})} = \frac{\alpha - \lambda}{1 - \lambda} \leq \alpha$$

since $\alpha \leq 1$. □

Proof of Proposition Five:

Given such behavioral assumptions, with probability p, a partisan auditor does not select a high waste project of the party with which she is affiliated over a low waste project. Thus, the legislature updates its beliefs as follows:

$$P(\text{partisan} \mid D = L) = P(\text{partisan} \mid R = L) = \frac{\frac{\alpha}{2}(0) + \frac{\alpha}{2}(\frac{p}{4} + \frac{1}{4})}{\frac{\alpha}{2}(0) + \frac{\alpha}{2}(\frac{p}{4} + \frac{1}{4}) + (1-\alpha)(\frac{1}{8})} = \frac{\alpha p + \alpha}{\alpha p + 1}$$

$$P(\text{partisan} \mid D = H) = P(\text{partisan} \mid R = H) = \frac{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}\frac{(1-p)}{4}}{\frac{\alpha}{2}(\frac{1}{2}) + \frac{\alpha}{2}\frac{(1-p)}{4} + (1-\alpha)(\frac{3}{8})} = \frac{3\alpha - \alpha p}{3 - \alpha p} \leq \alpha$$

since $\alpha \leq 1$.

For the nonpartisan legislature to be indifferent between firing and not firing (so that its expected utility is equal), the probability p that the **Take Big Hit Instead of Give Small Hit** condition does not hold must satisfy

$$\frac{\alpha p + \alpha}{\alpha p + 1} = \alpha + k$$

where k represents the cost to firing the first period auditor as measured by the addition in probability that the auditor is partisan that the nonpartisan legislature is willing to allow without firing the auditor. A legitimate value for p must be between 0 and 1. If the conditions hold as stated in the theorem (if

$\alpha + k < 1$ and if α is greater than or less than both $(1/2)[-k+1(+/-)(k^2-2k+2)^{1/2}]$, $p=k/[\alpha(1-\alpha-k)]$ provides a legitimate value.

A nonpartisan legislature must fire an auditor who chooses a low waste project with probability q so that a partisan auditor is indifferent between imitating and not imitating. Thus,

$$U_i(w_i = H) + \frac{1}{2}U_i(w_{-i} = L) + \frac{1}{2}U_i(w_{-i} = H) =$$
$$U_i(w_{-i} = L) + (1-q)\frac{1}{2}U_i(w_{-i} = L) + (1-q)\frac{1}{2}U_i(w_{-i} = H)$$

which by substituting in Equation (2) equals

$$\gamma U(H) + \frac{1}{2}U(L) + \frac{1}{2}U(H) = U(L) + (1-q)\frac{1}{2}U(L) + (1-q)\frac{1}{2}U(H)$$

which simplifies to

$$U(H)[2\gamma + q] = U(L)[2-q]$$

This gives a legitimate value of q if $\gamma \geq [U(L)-U(H)]/2U(H)$. □

Proof of Proposition Six:

Given the conditions on the auditor's utility function, partisan and nonpartisan auditors select projects in the first period as specified. By choosing all Republican projects, a Democratic auditor is rehired and does not have to sacrifice any utility in the first period. If the **Democratic Partisan Imitator** condition holds, a nonpartisan auditor is always rehired by choosing the Republican project in the first period; she sacrifices utility in the first period when faced with a Republican project with low waste and a Democratic project with high waste in order to be rehired for the second period. If the **Republican Take Small Hit Instead of Give Small Hit** condition holds, a strategic Republican auditor selects a Republican project only if both projects have low waste and chooses Democratic projects otherwise, for which she is fired. The legislature maximizes its utility when $(2\lambda'-\alpha')[U(H)+U(L)]\geq 0$. The Democratic legislature's firing rule is rational given these behavioral assumptions for the following reasons: First, if it sees a Democratic project of low waste, it should fire the auditor since only a Republican auditor would have selected such a project ($\lambda' < \alpha'/2$). Second, if it sees a Democratic project of high waste, it should fire the auditor because only a Republican auditor with probability ½ or a nonpartisan auditor (where the **Democratic Partisan Imitator** condition does not hold) with probability ¼ would have selected the project. With these probabilities, the legislature's updated belief

$$P(\text{Republican} \mid D = H) = \frac{\frac{\alpha}{2}(\frac{1}{2})}{\frac{\alpha}{2}(\frac{1}{2}) + (1-\alpha)\frac{1}{4}}$$

is greater than its belief P(Democrat | D=H)=0. Third, if it sees a Republican project with high waste, it should rehire the auditor since only a Democratic or nonpartisan auditor would have chosen such a project ($\lambda' > \alpha'/2$). Fourth, if it sees a Republican project with low waste and the **Republican Take Small Hit Instead of Give Small Hit** condition holds, it should also rehire the auditor since a Democrat auditor would have selected this project with probability ½ and a Republican auditor would have selected such a project with probability ¼ ($\lambda' > \alpha'/2$). If the condition does not hold, a Republican auditor will never select a Republican project with low waste ($\lambda' > \alpha'/2$). The same result obtains whether or not the **Democratic Partisan Imitator** condition holds. □

Proof of Proposition Seven:

Given the conditions on the auditor's utility function, partisan and nonpartisan auditors select projects in the first period as specified. To maximize her chance of being rehired, a nonpartisan auditor has a strict preference when projects have equal waste in the first period so long as a particular party is more likely to

be elected before the rehiring decision (if $p > ½$, a nonpartisan auditor should select a Republican project; if $p < ½$, a nonpartisan auditor should select a Democratic project). All other auditor actions follow directly from the utility functions. Given the specified selections by auditors in the first period, we must show that that the legislature's firing rule is rational. Without loss of generality, consider a Republican legislature, which maximizes its utility when $(2\lambda' - \alpha')[U(H)+U(L)] \leq 0$ or when $(\lambda' \leq \alpha'/2)$. The Republican legislature's firing rule is rational given these behavioral assumptions for the following reasons: First, when it sees a Republican project with low waste, it should fire the auditor because a Democratic auditor chooses such a project with probability ¼ (if the **Democratic Take Small Hit Instead of Give Small Hit** condition does hold) and with probability ½ (if the condition does not hold) but a Republican auditor chooses such a project with probability 0 (if the **Republican Take Small Hit Instead of Give Small Hit** condition does not hold) and with probability ¼ (if the condition does hold)—meaning $\lambda' \leq \alpha'/2$. Second, when it sees a Republican project with high waste, it should fire the auditor because a Democratic auditor chooses such a project with probability ½ but a Republican auditor never chooses a high waste Republican project $(\lambda' \leq \alpha'/2)$. Third, when it sees a Democratic project with high waste, it should rehire the auditor because a Republican auditor chooses such a project with probability ½ but a Democratic auditor never chooses a high waste

Democratic project ($\lambda' \leq \alpha'/2$). Fourth, when it sees a Democratic project with low waste, it should rehire the auditor because a Republican auditor chooses it with probability ¼ (if the **Republican Take Small Hit Instead of Give Small Hit** condition does hold) and with probability ½ (if the condition does not hold) but a Democratic auditor chooses it with probability 0 (if the **Democratic Take Small Hit Instead of Give Small Hit** condition does not hold) and with probability ¼ (if the condition does hold). A similar argument holds for a Democratic legislature. □

Appendix 2.B

An alternative model could construe auditor reports as potentially positive or negative. The timing would be similar to the model presented in the essay:[21]

Period One

1. The legislature hires an auditor.

2. With probability α, the auditor is partisan and favors either the Democrats (with probability λ) or the Republicans (with probability $\alpha - \lambda$). With probability $(1 - \alpha)$, the auditor is nonpartisan.

3. All projects generate either non-negligible waste (W) or no waste (N). Ex ante, both the legislature and the auditor know that it is equally likely that a given project will create waste or no waste.

4. The auditor learns actual amounts of waste for a Republican and a Democratic project, $w_{1,R}$ and $w_{1,D}$ where $w_{1,\cdot} \in \{W, N\}$. The legislature, however, does not know the level of waste for the two projects.

5. The auditor chooses to investigate one project, either the Republican program or the Democratic program, and produces a report for the legislature identifying whether or not that project has produced waste, either $w_{1,R}$ or $w_{1,D}$. The legislature requires this report to confirm the waste of a project.

Period Two

1. The legislature decides whether to fire or rehire the original auditor. If it fires the auditor, it hires a new auditor. With probability α, this new auditor is partisan and favors either the Democrats (with probability λ) or the Republicans (with probability $\alpha - \lambda$). With probability $(1 - \alpha)$, the new auditor is nonpartisan.

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[21] I am grateful to Susan Rose-Ackerman for suggesting this alternative model.

2. All projects generate either non-negligible waste (W) or no waste (N). Ex ante, both the legislature and the auditor know that it is equally likely that a given project will create waste or no waste.

3. The auditor learns actual amounts of waste for a Republican and a Democratic project, $w_{2,R}$ and $w_{2,D}$ where $w_{2,\cdot} \in \{W, N\}$. The legislature, however, does not know the level of waste for the two projects.

4. The auditor chooses to investigate one project, either the Republican program or the Democratic program, and produces a report for the legislature identifying whether or not that project has produced waste, either $w_{2,R}$ or $w_{2,D}$. The legislature requires this report to confirm the waste of a project.

5. Game ends.

This model would assume that it is equally likely that any given project has generated some or no waste. Like the model presented in the essay, a nonpartisan auditor wants to maximize the waste she reports to the legislature. Unlike the model in the essay, a partisan auditor would receive positive utility from showing that a project affiliated with the opposing party has waste or from showing that a project affiliated with her party has *no* waste. A partisan auditor would receive negative utility from showing that a project affiliated with the opposing party has no waste or from showing that a project affiliated with her party has waste.

I present a very simple example, along the lines of Proposition One in the text. Assume that the auditor is non-strategic and that the nonpartisan legislature wants to fire an auditor if its updated belief that the auditor is

partisan is greater than α. Assume further that the distribution of partisan auditors among the two parties is symmetric, $\lambda = \alpha/2$. Finally assume that a partisan auditor prefers taking credit for her own party's project having no waste to showing that the other party's project has waste and prefers giving credit to the other party when it has no waste to showing that her own party has waste. A Democratic auditor would thus choose the following projects:

Probability of Choice	Democratic Project	Republican Project
.25	W	W*
.25	W	N*
.25	N*	W
.25	N*	N

A nonpartisan auditor chooses a project with waste over a project with no waste, and will randomize between projects if they both have waste or if neither has waste. A legislature will want to fire an auditor if it sees a project with no waste reported in the first period and rehire the auditor otherwise. If the legislature sees a project with waste reported in the first period, its updated belief on the auditor being partisan is less than α. For example, a nonpartisan auditor decides to report on a Democratic project with waste with probability $p=\frac{3}{8}$ and a Republican auditor chooses to report on a Democratic project with waste with probability $p=\frac{1}{4}$. If the legislature sees a project with no waste reported in the first period, its updated belief on the auditor being partisan is greater than α. For example, a nonpartisan auditor will choose to report on a Democratic project with no waste with probability $p=\frac{1}{8}$; a Republican auditor

will choose to report on the same type of project with probability p=¼; and a Democratic auditor will choose to report on the same type of project with probability p=½.

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Who Walks the Watchdog?
Bureaucratic Oversight and the General Accounting Office

In a 1997 investigation of ailments described by Gulf War veterans, the General Accounting Office (GAO) found "substantial evidence" implicating nerve gas and chemical weapons in illnesses experienced by veterans. The report stood in marked opposition to findings of the Defense Department and the Presidential Advisory Committee on Gulf War Veterans' Illnesses. The Senate Armed Services Committee and the House National Security Committee had requested the GAO investigation, the findings of which were prematurely leaked to *The New York Times* by an official critical of the Pentagon's handling of the issue. The study provided ammunition to Defense critics within Congress. For example, Representative Christopher Shays (R-CT) argued that the report "supports the idea that we should take the Gulf War research program away from the Pentagon and give it to someone who really wants to find some answers."[1] The Defense Department and the presidential panel jointly criticized the GAO's conclusions, calling them "specious and misleading."[2]

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[1] Shenon (1997, 1, 18).

[2] Priest (1997, A2).

The GAO is just one overseer of the American bureaucracy, but it is a longstanding one.[3] Created in 1921 and strengthened after Watergate, the GAO monitors on its own initiative, by legislative mandate, and at the request of congressional committees and individual members of Congress. When working at the request of individual members, it engages in what McCubbins and Schwartz (1984) term "fire alarm" oversight—examining projects that have, as one GAO official explained, "bubbled" to the surface.[4] When performing periodic and legally mandated studies, the GAO functions more as a "police patrol" of the bureaucracy.

The GAO has provoked considerable controversy in recent decades. Under the elder President Bush's tenure, critics saw the GAO as calling for a Canadian-style health care system and for increased taxes to reduce the deficit.[5] After the Republicans gained control of Congress in the 1994 elections, the GAO faced a 25 percent budget cut that pared its personnel roster from

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[3] Aberbach (1990, 131) found that evaluations performed by congressional support agencies (including the GAO) were the second most frequently used form of oversight in the House of Representatives. Staff communication with agency personnel was the most frequent type of oversight.

[4] I conducted two days of face-to-face interviews and one day of telephone interviews with current and former GAO officials in September 1997. See Appendix 3.A for more details.

[5] Johnson (1996).

approximately 5000 to 3500 by 1996.[6] Under the younger President Bush's tenure, Representatives John D. Dingell (D-MI) and Henry A. Waxman (D-CA) have requested that the GAO investigate meetings of the energy policy development group chaired by Vice President Cheney. So far, Cheney's office has refused to turn over requested documents, prompting the GAO to sue.[7]

The GAO—whether perceived as a neutral watchdog or as a partisan player in bureaucratic politics—operates in a highly charged environment. How do members of Congress use the GAO to advance their own policy preferences? And how does the GAO choose to investigate policy programs on its own? To try to address these two questions, I proceed as follows. In Part I, I briefly describe the organizational structure and statutory duties of the GAO. In Part II, I summarize relevant literature on the GAO and on the broader issue of bureaucratic oversight. I develop a simple formal model in Part III of when a GAO investigation is congressionally requested (and whether by the majority or the minority) and when an investigation is performed without a congressional request. The model also incorporates the GAO's decision on whether to issue recommendations along with its report. In Part IV, I outline the testable propositions from the model and supplement

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[6] I describe various explanations for the budget cut in another essay, "Auditing Politics or Political Auditing?"

[7] Milbank (2002).

these hypotheses with ideas generated from my more detailed theoretical work on auditor reputation as well as from in-depth interviews with GAO officials. I describe the data used to test these propositions and the stylistic and statistical results in Part V. In Part VI, I discuss future research possibilities and offer concluding remarks.

I. Organization and Statutory Duties of the GAO

Representative James W. Good (R-IA), a principal sponsor of the 1921 legislation that created the GAO, believed that the GAO's head "should be something more than a bookkeeper or accountant; that he should be a *real critic*."[8] The GAO was initially independent of both the executive and legislative branches,[9] but was placed under the control of Congress in the Legislative Reorganization Act of 1945. The GAO's powers expanded after Watergate. The Congressional Budget and Impoundment Control Act of 1974, which created the Congressional Budget Office (CBO), established an Office of Program Review and Evaluation in the GAO to review and analyze government programs, whether in their design phase or in their implementation.[10]

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[8] Bowsher (1996).

[9] Budget and Accounting Act, ch. 18, 42 Stat. 20 (1921).

[10] Chelimsky (1991, 29); NAPA (1994, 47).

The GAO now serves as the primary watchdog agency reporting to Congress. The House Committee on Government Operations and the Senate Committee on Governmental Affairs oversee the GAO. At the GAO's helm are the Comptroller General and his deputy. Both are appointed by the President, from congressional recommendations, and approved by the Senate. The Comptroller General serves for 15 years and may not be appointed to a second term. He can be removed only for the most extreme reasons, for impairment or ineptitude, by a joint resolution of Congress.[11]

The Office of Comptroller General is among the most stable of the appointed leadership posts of the congressional support agencies. In contrast, the Director of the CBO serves for four years, after being appointed by the Speaker of the House and President of the Senate. The Librarian of Congress selects the Director of the Congressional Research Service (CRS) for what is a civil service position. Prior to 1995 when Congress terminated the Office of Technology Assessment (OTA), a special congressional board appointed the Director of the OTA for a six-year term.[12]

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[11] None of the Comptrollers General (McCarl, Warren, Campbell, Staats, Bowsher, Walker) has ever been removed, though not all were universally well received (e.g., McCarl, Bowsher). Trask (1991).

[12] Thurber (1981, 313).

Despite its budget cuts in Fiscal Years 1995 and 1996, the GAO is still the largest agency working for Congress, using its approximately $400 million annual budget to produce roughly 1500 audit and evaluation products, including reports to Congress and agency officials, formal congressional briefings, and congressional testimony statements.[13] Its literal statutory duties are vast:

> (1) investigate all matters related to the receipt, disbursement, and use of public money;
> (2) estimate the cost to the U.S. Government of complying with each restriction on expenditures of a specific appropriation in a general appropriation law and report each estimate to Congress with recommendations the Comptroller General considers desirable;
> (3) analyze expenditures of each executive agency the Comptroller General believes will help Congress decide whether public money has been used and expended economically and efficiently;
> (4) make an investigation and report ordered by either House of Congress or a committee of Congress having jurisdiction over revenue, appropriations, or expenditures;
> (5) give a committee of Congress having jurisdiction over revenue, appropriations, or expenditures the help and information the committee requests.[14]

According to one comprehensive study of the GAO, these statutory duties translate into six major areas of work: financial audits, economy and efficiency

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[13] GAO Accountability Report (1999, 31).

[14] 31 U.S.C. § 712.

audits, program evaluation, policy analysis and development, management studies, and special investigations.[15]

The GAO has remarkable freedom and power in investigating administrative agencies and relevant policy issues, checked only by the appropriations and authorization functions of Congress. For instance, the GAO does not answer to executive agencies but can allegedly obtain court orders to force agencies to release records as part of its work.[16] Though powerful, it is still a congressional agent, serving the diverse and decentralized needs of congressional committees and individual members. It must respond to committee requests and answers, in some form, almost all individual member requests.[17]

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[15] NAPA (1994, 37-38).

[16] This authority is now being contested in court. The GAO claims it has the authority to obtain documents from Vice President Cheney's office concerning meetings to develop the Bush Administration's energy policy. The Bush Administration claims that the GAO lacks such legal authority. Milbank (2002).

[17] Interviews with GAO officials (September 1997). One Issue Area Director stated that she would never reject an individual request but did acknowledge that not all requests have the same priority. All but one of the people whom I interviewed articulated a similar policy of not rejecting any request by an individual member of Congress. But one Director admitted that she has rejected an individual request if it was too narrow or constituent focused in certain rare circumstances.

In its beginning decades, the GAO mostly produced self-initiated projects. For instance, in Fiscal Year 1966, a congressional committee or member of Congress requested only 10 percent of the GAO's work.[18] Senator John McCain (R-AZ) tried to enact legislation in the 1990s that would have required the GAO to work only on what one Issue Area Director termed "real Congressionals," where the idea for a project originated from a member of Congress. The amendment failed, but the GAO is now much more targeted to completing congressional requests. Today, almost all of its work is completed pursuant to congressional requests or statutory requirements. In Fiscal Year 1999, 72 percent of the GAO's work was requested by a member or committee and an additional 23 percent was mandated by statute.[19] These projects consume substantial resources. The average cost of a GAO product was $219,000 and took about four months to complete in FY 1996.[20]

The GAO is the only congressional agency that makes recommendations. The National Academy of Public Administration, in a study commissioned by the Senate Committee on Governmental Affairs, classified

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[18] Walker (2000, 18).

[19] Id.

[20] GAO Annual Report (1996, 71).

the 916 recommendations made to Congress in FY 1987.[21] A majority (496) outlined changes to improve effectiveness of programs; 79 involved financial management; 78 suggested ways to reduce costs or increase revenues; 72 addressed congressional oversight or other legislative concerns; and 191 targeted other issues. Because these recommendations often adversely impact administrative agencies, the GAO's interactions with administrative agencies have been strained. Furthermore, congressional requesters often told the GAO not to obtain administrative agency comments—feedback from the subject of its inquiry—on its work. Until several years ago, members of Congress sprung reports on administrative agency officials in hearings, creating ill will.[22] The GAO's current policy is to seek comments from a targeted agency and include them in its reports.

II. Literature Survey

There has been little recent work in political science that focuses on the GAO. Mosher (1979) treats the GAO as an institution in a complex transaction process, balancing concerns for accountability and its own desire for independence. He does not perform any statistical analysis of the GAO; nevertheless, his work provides a useful starting point for a model that treats

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[21] NAPA (1989, 10).

[22] NAPA (1994, v, 34-35). Interviews with GAO officials (September 1997).

the GAO and other actors as strategic players in overseeing the bureaucracy. Klonman (1979) compiles a collection of case studies of the GAO.

Other political science work on the GAO is incomplete. Mosher (1984) compares the GAO and Office of Management and Budget (OMB), its executive agency counterpart. The comparison concentrates on organizational history and the challenge of balancing professionalism and political responsiveness. A wealth of information from interviews and primary sources, the work is more descriptive than predictive. The remaining sources focus entirely on the GAO's operation, with little emphasis on other institutions. For example, Pois (1979) details the powers of the Comptroller General and how the policy process is seen from his perspective, and Walker (1986) examines the motivations of GAO employees as a study in organizational behavior.

There are many historical examinations of the GAO. Mansfield (1939) provides a substantial critique of the GAO prior to World War II, while Smith (1927) and Willoughby (1927) present descriptive accounts of the GAO's early organizational structure. Benson (1931) compares American and European approaches to government accountability and argues that the GAO mainly caters to Congress, but does not consider what motivates the GAO as an institution. Several commissioned histories of the GAO (Trask (1996), Trask (1991), Sperry (1981)) offer detailed chronological descriptions of the GAO's

interaction with Congress, the executive branch, and other administrative agencies.

Although this essay focuses on the GAO, it fits into a wider literature on bureaucracy and congressional politics. One increasingly popular framework in political science sees the bureaucracy as an agent to multiple overseers or principals (i.e., Congress, the executive branch, and the courts).[23] Legislative and executive principals constrain the bureaucracy from straying too far from the wishes of its sponsors by monitoring its actions in a variety of ways.[24]

These principal-agent theories of the bureaucracy share a critical assumption: The agent has information that is costly for the principal to acquire. This information may be of value to legislative principals for a variety of reasons. Some commentators (Whiteman (1995), Maisel (1981)) underscore the importance of any policy-related information to members of Congress—to assist in committee work, to help in writing speeches, to guide voting choices, or to assist in district and constituency service. Mayhew (1974) argues that

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[23] On theory, see, for example, Moe (1984). On its application, see, for example, Wood and Waterman (1994).

[24] Examples include judicial review, appointments, freedom of information requests, hearings, investigations, appropriations legislation, authorization legislation, legislative vetoes, inspectors general, audits, interest groups, ad hoc groups, reporting requirements, and casework. Arnold (1987); Oleszek (1996, 300-23); Rosen (1982); Sundquist (1981, 315-66). Studies by third parties can restrict the decision making of an agency and can enfranchise particular interests. McCubbins et al. (1989, 473, 475).

members of Congress will pursue information related to oversight only if it helps their chances of being re-elected. Krehbiel (1991) posits that Congress creates institutions to maximize access to policy expertise rather than primarily to facilitate the transfer of resources to members' districts. Whiteman (1995) attempts to test the impact of issue environments, personal factors and politically related factors on whether reports will be used in the policy formation process. It is, however, quite difficult to determine systematically how and why members of Congress use information.

It may be possible to analyze the goals of members of Congress by examining what information they request from the CRS, CBO, and GAO. Do members of Congress use the GAO to build policy expertise or to build their chances for reelection? What other factors influence oversight of the bureaucracy? There is unequal oversight applied to administrative agencies. Ogul (1976) suggests that the legal authority, type of subject matter, committee structure, congressional relations with the Executive, and member priorities influence how much oversight will be performed. Aberbach (1990) posits that divided government, the distributive nature of the policy issue, and the structure of the congressional body influence bureaucratic oversight. Wittman (1995) claims that budget size, issue importance, and the extent of competition for what the bureaucracy supplies help determine the extent of oversight.

Talbert, Jones, and Baumgartner (1995) argue that members of Congress use non-legislative committee hearings to claim jurisdiction over issues.

Most work in the principal-agent framework treats bureaucratic oversight as a problem between a single principal and a solitary agent. For instance, Banks (1989) sets up a simple asymmetric model between Congress and an administrative agency that incorporates a costly congressional auditor to verify an agency's claimed costs of providing specific services but that also assumes that the auditor is a perfect agent of Congress. More recent work incorporates multiple principals. But the GAO and other informational agencies of Congress are not simple extensions of the legislature. They too possess informational advantages over Congress and must be monitored. Skocpol (1996) suggests that the CBO was nearly a sovereign actor in the debate over health care reform in the early 1990s. Furthermore, an information agency's existence is not guaranteed. Bimber (1996) traces the establishment and demise of the OTA as a story of politics of expertise. In recent years, the GAO has come under fire regarding its perceived Democratic bias.[25] The Senate Committee on Governmental Affairs, which oversees the GAO, commissioned a report by the National Academy of Public Administration on

[25] In the 1980s and 1990s, Republicans attacked the GAO for serving only Democratic interests. In 1991, the Republicans tried unsuccessfully to cut the GAO's budget; they were successful in 1995. See Carney (1993); Kuntz (1991a & 1991b); McFadden (1992).

the GAO. This 1994 report called for restraint in the use of the GAO and for continual oversight of the agency.[26] Much earlier, commentators were calling for the GAO to steer away from political decisions and even advocating that individual member requests to the GAO be barred.[27]

Any principal-agent framework of the bureaucracy must also allow for conflict between the principals of the bureaucracy—Congress, the Executive, the courts, and various interests. Wilson (1995) and Melnick (1994) argue that congressional support agencies and increased size of congressional staff have acted to "counteract" the organizational and informational resources of the executive branch. Wye and Sonnichsen (1992) believe that information provides control in the policy process. They worry that the executive branch is losing important sources of information by neglecting program evaluation. Wood and Waterman (1994) suggest that the responsiveness of the bureaucracy to its principals may not be serving democratic representation, that some principals provoke responsiveness contrary to the direct interest of the public. Determining how and why information is strategic in such a framework would provide one helpful perspective on this complex interaction between the bureaucracy and its overseers.

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[26] NAPA (1994, I).

[27] Brown (1970).

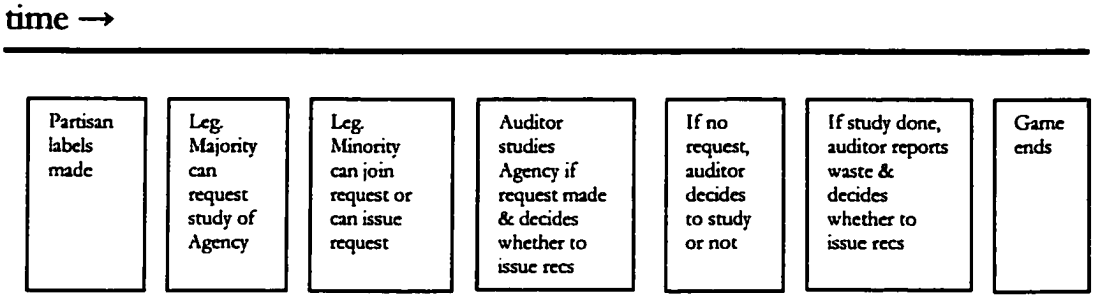
There are oversight models in the political economy literature that could be applied to the GAO, but they do not capture the GAO's unique institutional structure. For instance, the GAO could play a preference-less objective auditor. Or it could act as an "interest group" that threatens to sound fire alarms so that it can obtain benefits for its members. But the GAO is neither a mindless auditor nor is it an interest group unconnected to the legislature and tied to a separate, vested constituency. Members of Congress use the GAO to advance a range of objectives including potentially the desire to be re-elected, the need for information on policy issues that are on the legislative or media agendas, and the hope to initiate, modify or cancel various policies. The GAO also acts on its own initiative and with its own preferences, without being directed by Congress. Its incentives and the incentives of those who can access it make the GAO a strategic and interesting institution in policy formation and oversight. I turn to a simple model of this institution in the next section.

III. Formal Model

To examine how members might use the GAO and how the GAO might act on its own, I have formalized a basic game between the majority and minority of a legislature, an executive, and a quasi-independent auditor. The interaction focuses on whether to investigate a particular agency that has

wasted x percent of its budget.[28] The legislative majority decides whether to request an evaluation of this agency by the auditor. If it submits a request, the legislative minority may elect to join the request. If the legislative majority decides not to issue a request, the legislative minority may ask the auditor to investigate. If any or both of the legislative parties issue a request, the auditor conducts an investigation and reports the level of waste x to the legislature. The auditor may decide to issue recommendations as well. If neither legislative party requests a study, the auditor can elect to investigate the agency on her own and then produce a report to the legislature. Again, the auditor may add recommendations. The party affiliations of the executive and the legislative groups are provided exogenously. The sequence of events is illustrated more simply below:

[28] Clearly, a rational agency will foresee the actions by the legislature and auditor. And if the agency faces a considerable punishment for shirking or changing the policy direction, it will behave in such a manner so that it escapes a full investigation. I am more interested in the use of oversight for political objectives, and I ignore the agency's strategic response. Assume an investigation turns up something disadvantageous to the agency, no matter what diligence the bureaucrats decide is in their interest to employ. This discovery is the percentage of waste x.



Although the executive does not have any choice in this game, its party affiliation affects the payoffs to the legislative majority, legislative minority, and the auditor. The extended form of the game with the bottom boxes providing payoffs (to the legislative majority, legislative minority, and auditor, respectively) is detailed in Figure 3.1. The parties' payoffs depend on whether they are in the same party as the executive. If the majority party requests an investigation, its payoff is $\alpha x + g(x)$ where $\alpha < 0$ if its party is the same as the party in control of the executive branch and $\alpha > 0$ if the parties differ and where $g(x)$ is a function of the waste x that can produce negative or positive values. Similarly, if the minority party requests an investigation, its payoff is $\beta x + h(x)$ where $\beta < 0$ if its party is the same as the party in control of the executive branch and $\beta > 0$ if the parties differ and where $h(x)$ is a function of the waste x that can result in negative or positive values. So $\alpha\beta < 0$. If the majority party does not request an investigation but one is conducted, its payoff is αx. Likewise, if the minority party does not request an investigation but one is done, its payoff is βx. This payoff structure allows for the possibility that

although a party dislikes waste being discovered in a project being conducted by appointees from its own party, it may still get benefits from requesting such an investigation. For example, assume α=-1 and x=0.6. If g(x)= ½ x, the majority party's (which is the same party as the President by assumption) payoff from requesting an investigation is negative (αx + g(x) = -.6+.3 = -.3). If g(x)=2x, the majority party's payoff from requesting an investigation is positive (αx + g(x) = -.6+.12 = .6).

The payoffs to the majority and minority depend on whether they have requested an investigation and whether an investigation is conducted. It does not matter whether the auditor also issues recommendations for change. Assume that the parties can decide what to do with the report, and that these options do not depend on whether the auditor makes particular recommendations.

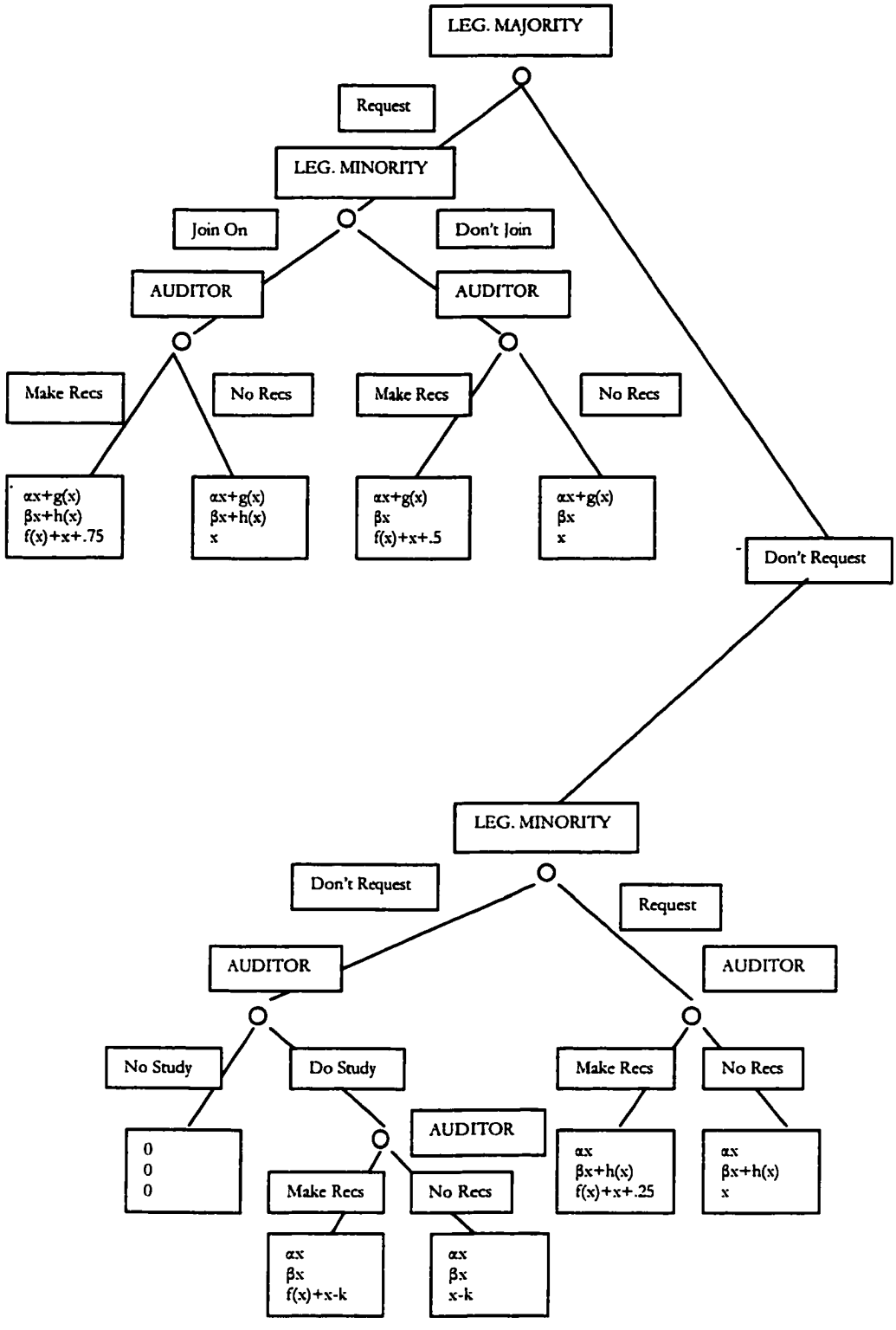
The auditor can modify her payoff by issuing recommendations in addition to her report, represented by (f(x) + constant) in the game tree. For intuition, consider the following two scenarios where the auditor investigates the Environmental Protection Agency, discovers mismanagement in the EPA's pollution control program, and issues recommendations to the EPA for changing its program. One possibility is that the EPA attacks the auditor for her allegedly shoddy work, and *The New York Times* ignores the auditor's study.

The other possibility is that *The New York Times* covers the study on its front page, and the EPA tries to attack the auditor but fails.

If the auditor issues recommendations, she receives some amount f(x), with negative values signaling backlash and positive values signaling publicity and muted agency response; some payoff representing the support of the legislature (if both parties asked for the study, they will back the auditor against the agency; if only one party asked for the study, it still backs the auditor but the support depends on whether it is the majority or minority); and some positive utility from the level of waste x.[29] If the auditor investigates without a legislative request, she must pay a cost *k*. The cost may be considered an implicit budget constraint for the auditor on her self-initiated work.

[29] The auditor enjoys identifying mismanagement after all.

Figure 3.1



Because this is a game of perfect information, I apply backward induction to determine what actions the auditor and legislative parties will take. At the last step, the auditor must decide whether to issue recommendations to complement a report. She must weigh her payoffs in the following cases:

Requester	Make Recommendations	Don't Make Recommendations
Both Parties	$f(x) + x + .75$	x
Majority Only	$f(x) + x + .5$	x
Minority Only	$f(x) + x + .25$	x
No Party	$f(x) + x - k$	$x - k$

If the expected backlash or affirmation, in combination with legislative support, is greater than zero, the auditor issues recommendations along with her report. If the auditor has to decide whether to investigate the agency without a legislative request, the auditor evaluates the agency if

$\max\{f(x) + x - k, x - k\} \geq 0$.

If the auditor decides to evaluate the agency without a request at the end of the game, the legislative minority must weigh the payoff to requesting the study, $\beta x + h(x)$, against the payoff to refusing to request the study, βx. If $h(x) \geq 0$, the minority party will request the study. (If the auditor decides not to investigate on its own, the legislative party must balance its payoff to requesting the study, $\beta x + h(x)$, against a payoff of 0.) Moving up one level, if the auditor decides to evaluate the agency without a request or if the minority

party will request an investigation, the legislative majority must consider whether the payoff to requesting the study, $\alpha x + g(x)$, is at least as great as the payoff to refusing to request the study, αx. If $g(x) \geq 0$, the majority party will request the study. (If the auditor decides not to investigate on its own and the minority party does not request the evaluation, the legislative majority must balance its payoff to requesting the study, $\alpha x + g(x)$, against a payoff of 0.)

Consider two examples where the majority party is the same party as the President. First, assume $x=0.3$, $g(x)=h(x)= \frac{1}{2} x$, $\alpha=-1$, $\beta=1$, $f(x)=-2x$, and $k=0.2$. Both parties receive positive utility from requesting a study (separate from the utility from the study being conducted). The auditor faces a backlash, $f(x)$, if she issues recommendations. Both the majority and the minority will request the investigation ($g(x)=h(x) >0$), and the auditor will issue recommendations ($f(x)+.75 > 0$). Second, assume $x=0.3$, $g(x)= -\frac{1}{2} x$, $h(x)= \frac{1}{2} x$, $\alpha=-1$, $\beta=1$, $f(x)=-2x$, and $k=0.2$. Now the majority party receives exclusively negative utility from requesting a study. Only the minority party will request the investigation ($h(x) > 0$, $g(x) < 0$) and the auditor will not issue recommendations ($f(x)+.25 < 0$).

This framework provides some testable propositions. First, auditors are more likely to make recommendations when investigations are requested by the legislature, and in particular, when both the majority and minority party have requested the investigation. Second, legislative parties request investigations

only if such reports bring greater utility as a requester than as a non-requester (perhaps because members can claim they are concerned about a particular issue to their districts or because they have particular policy expertise in the matter). Third, a legislative party is more likely to request a study when it is not the same party controlling the bureaucracy, all other factors being equal. I supplement these propositions in the next section with information obtained from interviewing GAO officials and from my other essay on self-initiated work by an auditor of politics who is concerned about her reputation.

IV. Hypotheses

The formal model in the previous section, in conjunction with my work on auditor reputation and interviews of GAO officials, generates several theories on how members of Congress use the GAO and how the GAO acts on its own initiative.

A. Congressional Use of the GAO

Representative James Talent (R-MO), opposed the EPA's plan for using incineration to clean up Times Beach, a site in his home state littered with toxic contaminants such as dioxin and PCBs. Talent and four other members of Congress alleged that the agency had neglected other alternatives and turned to the GAO, asking it to investigate the EPA's decision process. In January 1996,

the GAO essentially defended the EPA, concluding that the EPA considered alternatives but that incineration was the preferred option at that time.[30]

Many factors may motivate individual members or committees of Congress to turn to the GAO. Tax burdens, district demographics, policy expertise, election concerns, media attention, size of agency budgets, size of congressional staff, structure of committees, party control across government branches, and other items may affect such decisions. Although the GAO tries to shape the scope of requested work, it rarely rejects a congressional request. I consider two theories for why members of Congress may turn to the GAO or another oversight mechanism.

First, members of Congress may use oversight to achieve certain policy goals. Members of Congress may thus turn to the GAO to check on administrative agencies, especially when the appointees running the agencies are not affiliated with the members' political party. Likewise, members may request GAO studies of programs they opposed in the legislative process. Aberbach (1990) states that Republicans utilized various oversight mechanisms to critique and modify policies enacted under President Johnson's Great Society programs. Members may believe that GAO investigations hurt policy proponents and program officials, who will have to expend time and resources

[30] Uhlenbrock (1996).

during and after the GAO evaluation. Members may also anticipate that GAO reports will substantively impact how congressional mandates are interpreted and applied.

During my interviews, most of the officials acknowledged that members of Congress use the GAO's "aura" of objectivity to advance partisan, or as an Associate Director said, "strategic," objectives. One Issue Area Director stated that the requests for work in her area fundamentally shifted after the 1994 congressional elections, though an Issue Area Associate Director stated that the Republicans took some time to learn that the GAO could be used against the Democrats. It is possible that members would use the GAO to preempt criticism of their favorite programs. For instance, an armed services committee chaired by a Republican could turn to the GAO to investigate a pet project at the Defense Department to counter or preempt allegations of waste or mismanagement. But because members cannot control the results of what the GAO finds, they may likely be too risk averse to engage in such behavior as frequently as using the GAO to attack programs they dislike.

Hypothesis One:

Political parties in Congress may use the GAO to try to undermine programs supported by the executive branch. In periods of divided government, congressional members and committee chairs request more GAO investigations. In periods of united government, members of the minority party request more studies.

Second, members of Congress may act to maximize their chances of reelection.[31] Members may submit particular requests for GAO studies in order to appear active and vigilant to constituents. For example, one Director stated that a Florida senator made many requests concerning energy issues when the former Soviet Union was building a nuclear reactor in Cuba. Analyzing one year of GAO audit data, Willison (1987) finds that members from high tax districts request more GAO evaluations. Such districts pay a disproportionately higher share of government programs and perhaps demand more vigilance by their representatives. To the extent that voters have short-term memories, members may oversee (or request others such as the GAO to monitor) government programs more diligently closer to any relevant election.

Hypothesis Two:

Senators up for reelection in the next congressional cycle request more studies than senators not facing reelection.

B. Self-Initiated Work of the GAO

The GAO could choose to audit policy programs as a neutral watchdog for waste or as a political auditor that advances its own or others' policy objectives. In "Auditing Politics or Political Auditing," I show how a nonpartisan auditor who faces a rehiring decision by a political principal may mimic a partisan auditor (in order to be rehired to cut waste in future periods)

[31] Mayhew (1974).

as well as how a partisan auditor may imitate a nonpartisan auditor and investigate her own pet projects (in order to attack disfavored projects in later periods). Similar behavior could also result if auditors are concerned about the size or security of their budget.[32] In essence, an auditor may build a particular reputation to garner more resources, or simply to obtain the opportunity, to undertake desired investigations in the future.

Criticism of the GAO prior to the 1994 congressional elections, when the Republicans captured the House and the Senate, is consistent with this theory. Sharkansky (1975) cites the argument that the GAO has a policy bias in favor of Labor Department programs and a bias against Defense Department programs. *The American Spectator* and other conservative pundits have asserted that the GAO placates the Democrats in Congress.[33] In the early 1990s, Senator Christopher S. Bond (R-MO) complained that the GAO was "like Alice's Restaurant. Whatever you order is what you get. It's not so much a professional, independent review as an effort to provide what those in power want to hear."[34] Such perceptions accord with the theory that the GAO was trying to please those who controlled its resources: the Democrats in Congress.

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[32] See Arnold (1979); Banks and Weingast (1992); Niskanen (1971).

[33] See Carney (1993); Kuntz (1991a & 1991b); McFadden (1992).

[34] Carney (1993, 2536).

One former Assistant Comptroller General stated that the GAO considers five criteria when choosing what to investigate without a congressional request: the potential benefit to taxpayers, the ability to have an impact, level of national attention, potential for a congressional request, and the desire to take on high risk projects. But he also acknowledged that such choices are made in a "strategic, tactical way." Another Assistant Comptroller General argued that self-initiated work (or "basic legislative responsibility" work as it is called by GAO officials) is necessary for the GAO to "obtain objectivity." An Issue Area Director stated that a good issue for self-initiated work is one with a high level of waste but also one with media appeal. An Issue Area Associate Director admitted that she does not want a "touchy" issue to be addressed without a congressional request. If the GAO is concerned about how it is perceived by its sponsors in Congress, its self-initiated work may be targeted to congressional majorities no matter what preferences are held by the GAO itself. This could play out in several ways.

Hypothesis Three:

The GAO chooses projects that will be pleasing to the majority in Congress (or if Congress is split between the parties, to the majority in the House).[35] The GAO may want to please the majority because it desires larger budgets or because it has similar ideological preferences.

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[35] The Issue Area Directors whom I interviewed stated that the House was the primary client of GAO reports. Many senators, however, request investigations, and Senator McCain (R-AZ) often berates the GAO.

The GAO may, in fact, be concerned only about cutting waste in the bureaucracy. To the extent that agencies with larger budgets may face more opportunities for inefficiency, the GAO may target big-ticket projects.

Hypothesis Four:

Agencies with larger budgets are subjected to more self-initiated investigations by the GAO.

C. Other Decisions by the GAO

Once the GAO chooses to investigate a particular program or agency, whether on its own initiative or due to a congressional request, it has the option of issuing recommendations to Congress or to any agency involved.[36] One Assistant Comptroller General stated that the GAO tries to avoid making policy recommendations, preferring instead to make suggestions on the "acquisition, use, protection or monitoring of resources." But he admitted that the GAO does occasionally get involved in how to solve particular problems. An Associate Director in one of the issue areas acknowledged that she does not like to make recommendations if the report involves a "really touchy" issue. The GAO may expect certain reactions to its products, but may still want to avoid particular coalitions criticizing its findings. Interestingly, the GAO does

[36] An agency must submit a statement to a designated congressional committee explaining what has been accomplished on each GAO recommendation. 31 U.S.C. § 720. The GAO also tracks its recommendations to see if they are being implemented.

not hold press conferences when it issues a report; it also does not typically issue a statement. One Assistant Comptroller General indicated that "if [the GAO's] integrity is attacked, [we] will respond to questions." According to the Director of Congressional Relations, staff members often are disappointed that the GAO does not mount an offensive to defend their work.

Constrained in its ability to "spin" its work, the GAO may likely try to avoid united criticism by both the executive and legislative branches. If one branch of government will be opposed to its work, the GAO may prefer to satisfy the congressional majority, which controls its budget, than the executive branch, which it is supposed to monitor.

Hypothesis Five:

The GAO will make fewer recommendations when its work is not congressionally requested. All other factors being equal, the GAO will make more recommendations when the majority party requests the investigation than when the minority party asks for a study.

V. Stylistic and Statistical Results

A. Data

I test some of the hypotheses described in the previous section using information from the GAO Documents Database, which catalogues details on all published GAO reports and testimony to Congress for Fiscal Years 1978-

1999.[37] The number of GAO documents (encompassing both testimony and reports) ranges from 691 to 1390 for a given Fiscal Year. The average is 1099.8. The data files contain the following information (if applicable) on each published document: title, issue date, type of document (e.g., fact sheet, in-depth investigation or "chapter report", testimony, etc.), page count, issuing GAO division, subject matter, organizations concerned, primary budget function concerned, primary issue area concerned, legal authorities cited, congressional relevance, any requester information, abstract, background, findings, recommendations to Congress, and recommendations to agencies.

Much valuable information is contained within these document records. First, the number of subjects functions as a measure of a product's scope.[38] Second, the total number of pages (in the main document and any related appendices) serves as a proxy for the time invested in the project and perhaps also for its importance. The presence of the Comptroller General's signature on a project is also noted and likely signals its importance. Third, in addition to counting the total number of organizations concerned, I was able to classify them by type: cabinet departments (and which one), other administrative

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[37] Lockheed Martin, a government contractor, maintains this database and graciously provided me with the complete text files and accompanying budget and issue codes for FY 1978-1999.

[38] Using Perl, a programming language well designed for pattern matching in text documents, I pulled off the information and placed it in a database format.

agencies, executive branch offices, judicial entities, legislative organizations, state governments or associations, private companies, international organizations or foreign countries, or general government operations. Fourth, in addition to determining whether a document was congressionally requested or legislatively required, I classified how many requesters were House committee chairs, Senate committee chairs, House committee ranking minority members, Senate committee ranking minority members, individual House members, and individual Senate members. Fifth, the primary budget functions and issue areas correspond to broad (as well as specific) policy areas. For example, budget function 51.1 falls in the general National Defense category and the specific Weapons Systems subcategory. Finally, I coded the originating GAO office for each document, classified the type of document, and counted the legal authorities cited, any recommendations to Congress, and any recommendations to any targeted agency.

To complement the information contained within the GAO Documents Database, I added basic political information about Congress and the presidency. I created dummy variables to indicate which President was serving (and in what term) at the time that a document was issued. I also included information about the partisan control of the House and the Senate[39] and

[39] These variables measure the percentage difference in numbers of Republican and Democratic members. A positive number indicates Democratic control; a

whether the report was issued under divided or united government. Appendix 3.B provides more detailed information about the data.

B. Results on Congressionally Requested Work

I start by looking at the trends in congressionally requested work. The hypotheses in the previous section presume that the true identity of requesters of various GAO products can be determined. The data does provide a list of official requesters, when applicable, for products. During my interviews, I learned, however, that GAO staff members sometimes "shop" proposals for research to members of Congress in the hope that they will be officially tasked to investigate particular subjects. According to the Director of Congressional Relations of the GAO, this is a particularly sensitive issue for the GAO because there is distrust by some parties that the GAO has "its own agenda." Because it is impossible to determine what reports were initiated by the GAO and merely signed onto by Congress, I am forced to assume that members of Congress will agree to request studies only if it is in their interest to do so. It seems highly implausible that members of Congress would agree to request a study solely to keep GAO staffers busy at the GAO's request.

Figure 3.2 charts the percentage of GAO work that is congressionally requested (including work required by statute) and the corresponding

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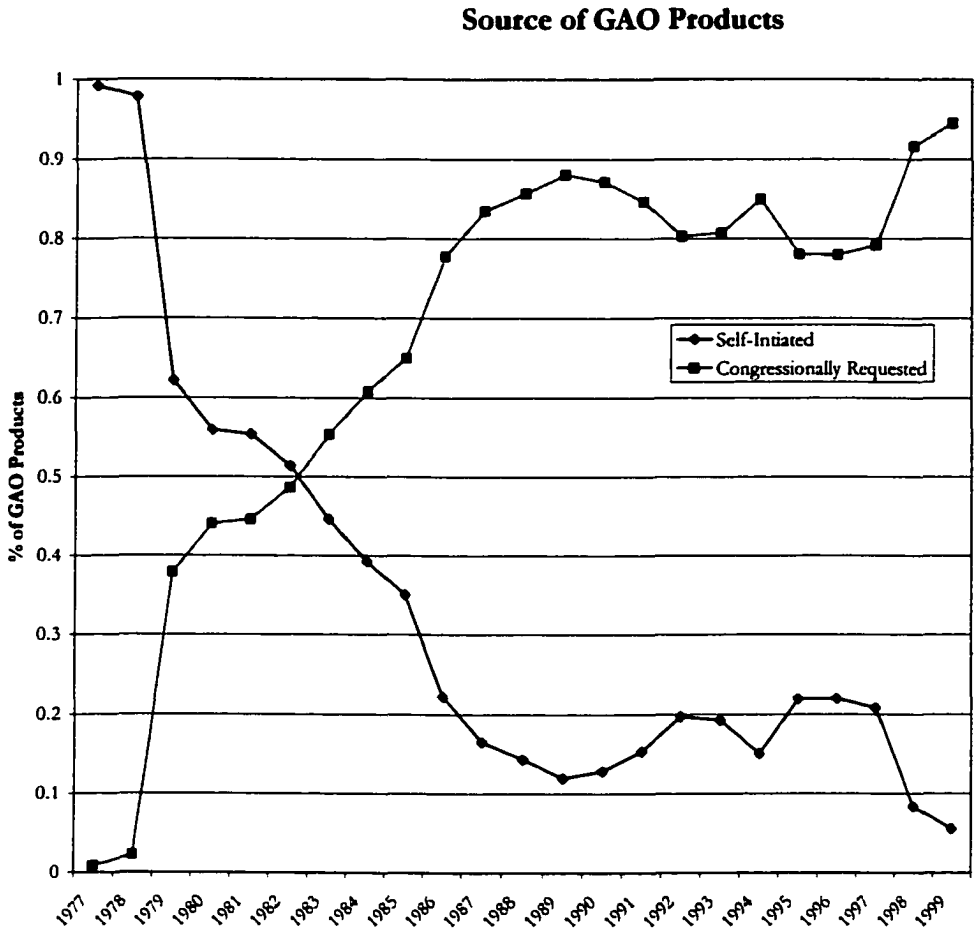
negative number indicates Republican control. See Appendix 3.B for detailed information.

percentage of work that is performed by the GAO without a congressional request over the time period covered by the data.

Figure 3.2



N=19542 (no missing data).
GAO Documents Database (all non-Testimony products) for FY 1978-1999.

What is most noticeable is that the GAO has performed more studies at the request of Congress over time and fewer studies on its own initiative. Interestingly, under united government in 1993 and 1994, there was a slight

increase in the percentage of congressionally requested work after several years of slight decline. Perhaps, minority members are most anxious under unified government and turn to the GAO for some balance in the policy making process. In the last two years, corresponding to the leadership of the latest Comptroller General David Walker, almost all of the GAO's work has been in response to a congressional request or legislative mandate.

To learn more about the factors that may influence whether a GAO product is congressionally requested (or required), I first ran a simple logit regression, which does not differentiate among the type of requester (for example, a committee chair or a committee ranking minority member) for all GAO products issued between 1986 and 1997. I chose this time period because the percentage of congressionally requested work remained relatively constant. It corresponds to the tenure of Comptroller General Bowsher and of Acting Comptroller General Hinchman. The regression considers whether the length of product, scope of the product (as measured by the number of covered subjects), number of particular types of non-cabinet agencies concerned, cabinet departments concerned, and various partisan measures of the executive and legislative branches influence whether a study is congressionally requested.[40] Some of these variables, such as product length

[40] I do not consider interactive effects between party majorities in Congress and the presence of divided government. Any interactive variable is too highly

and scope, pose potential endogeneity problems. But the proposed range and depth of an investigation likely impacts whether it is requested (and by whom). Table 3.1 presents results for this general model.

The number of executive offices (such as the Executive Office of the President or the Office of Science and Technology Policy) concerned and the number of government-wide entities involved[41] appear to negatively affect whether a report is requested. The number of states or state entities concerned, the number of foreign countries or international organizations (such as the United Nations or World Bank) involved, and the number of private companies concerned seem to positively affect whether a product is requested. A report involving the Commerce Department, Energy Department, Health and Human Services Department, Interior Department, or the Justice Department is more likely to be requested. Democratic control of the Senate also makes it more likely that a study is requested. A report impacting the Defense Department, Education Department, or the Treasury Department is more likely to be self-initiated. Interestingly, neither party control of the House nor divided government more generally is a significant

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correlated with the House and Senate variables. In the time period of the data, when government is divided, the House majority and the President are always from different parties. The same holds true for the Senate majority and the President, except for 1986.

[41] A GAO product is often listed as having "government-wide" implications.

factor. Table 3.2 presents several first differences for this model. A shift in party control of the Senate (from Democrats to Republicans) has a 2.99 percent decrease in the probability of a report being congressionally requested. A report that goes from not affecting to involving the Defense Department corresponds to a 4.87 percent decrease in the probability of request; whereas a report that goes from not concerning to concerning the Energy Department leads to a 4.74 percent increase in the probability of a study being requested.

Table 3.1: Logit (Requested/Required Products, 1986-1997)

PAGES	3.00E-3*** (5.93E-4)	**ENERGY DEPARTMENT**	0.39*** (0.12)
SCOPE	9.07E-4 (0.02)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.21** (0.10)
# OF EXECUTIVE ENTITIES	-0.34*** (0.07)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.23 (0.14)
# OF GOV'T WIDE ENTITIES	-0.50*** (0.13)	**INTERIOR DEPARTMENT**	0.63*** (0.16)
# OF STATES OR STATE ENTITIES	0.47*** (0.13)	**JUSTICE DEPARTMENT**	0.49*** (0.14)
# OF PRIVATE COMPANIES	0.12** (0.06)	**LABOR DEPARTMENT**	-0.13 (0.14)
# OF INT'L ORGS OR COUNTRIES	0.30** (0.10)	**STATE DEPARTMENT**	-0.13 (0.11)
# OF JUDICIAL ENTITIES	0.39 (0.30)	**TRANSPORTATION DEPARTMENT**	0.17 (0.12)
# OF LEGISLATIVE ENTITIES	-0.07 (0.08)	**TREASURY DEPARTMENT**	-0.40*** (0.12)
# OF NON-CAB. AGENCIES	1.93E-3 (0.03)	**VET AFFAIRS AGENCY OR DEPARTMENT**	-0.23 (0.14)
AGRICULTURE DEPARTMENT	-0.07 (0.10)	**HOUSE CONTROL**	-0.18 (0.52)
COMMERCE DEPARTMENT	0.38** (0.15)	**SENATE CONTROL**	1.98*** (0.67)
DEFENSE DEPARTMENT	-0.33*** (0.06)	**DIVIDED GOVERNMENT**	0.11 (0.07)
EDUCATION DEPARTMENT	-0.34** (0.14)	**LEGAL AUTHORITY**	0.15*** (0.06)

N=10751 (no missing data). GAO Documents Database (all non-Testimony products) for 1986-1997.
*** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=294.81***. Constant: 1.44***(s.e. 0.19). Pseudo R^2 =0.03.

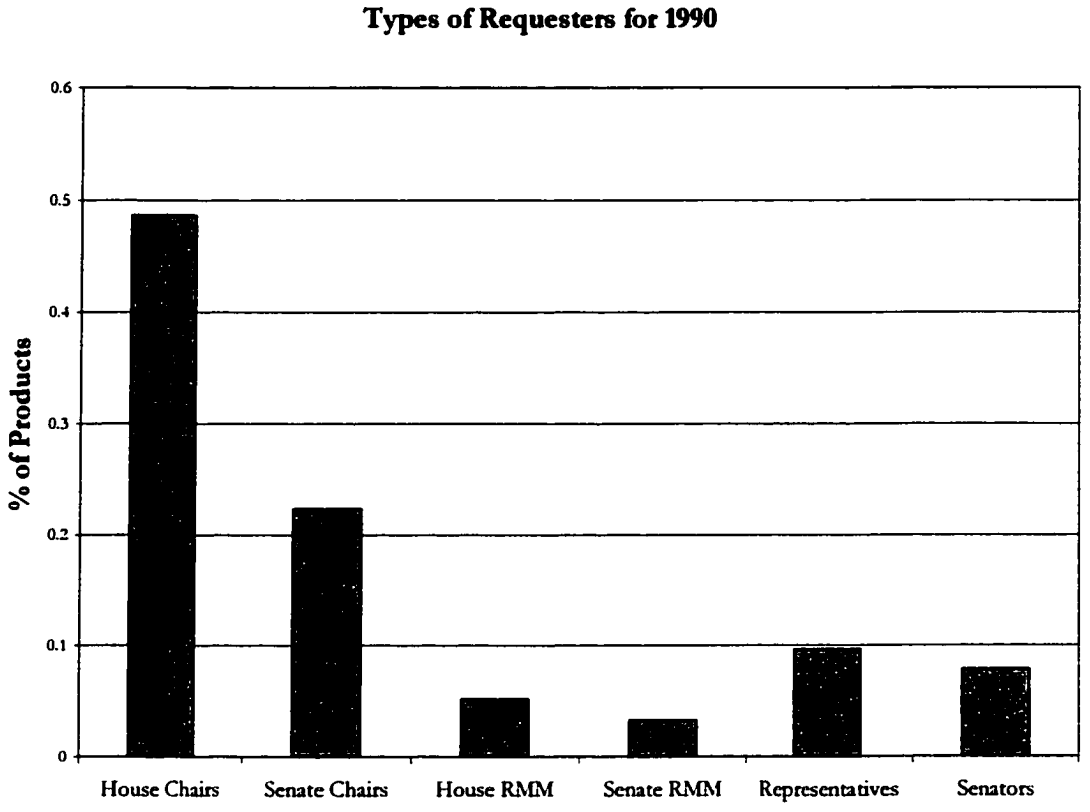
Table 3.2: First Differences for Requested/Required Work[42]

Variable	X_1	X_2	%ΔP(request)
CONTROL OF SENATE	0.05 (Democratic)	-0.05 (Republican)	-2.99% (1.07)
DEFENSE DEPARTMENT	0 (absence)	1 (presence)	-4.87% (0.91)
ENERGY DEPARTMENT	0 (absence)	1 (presence)	4.74% (1.30)

This model is rather problematic. It does not distinguish among reports requested by House committee chairs, reports requested by Senate committee chairs, reports requested by House committee ranking minority members, reports requested by Senate committee ranking minority members, reports requested by individual House members, and reports requested by individual Senators. A GAO product could be requested by any or all of these categories; it could also be required by a legislative mandate. Figures 3.3 and 3.4 display the breakdown of non-testimony products by type of requester for 1990 and 1996, respectively.

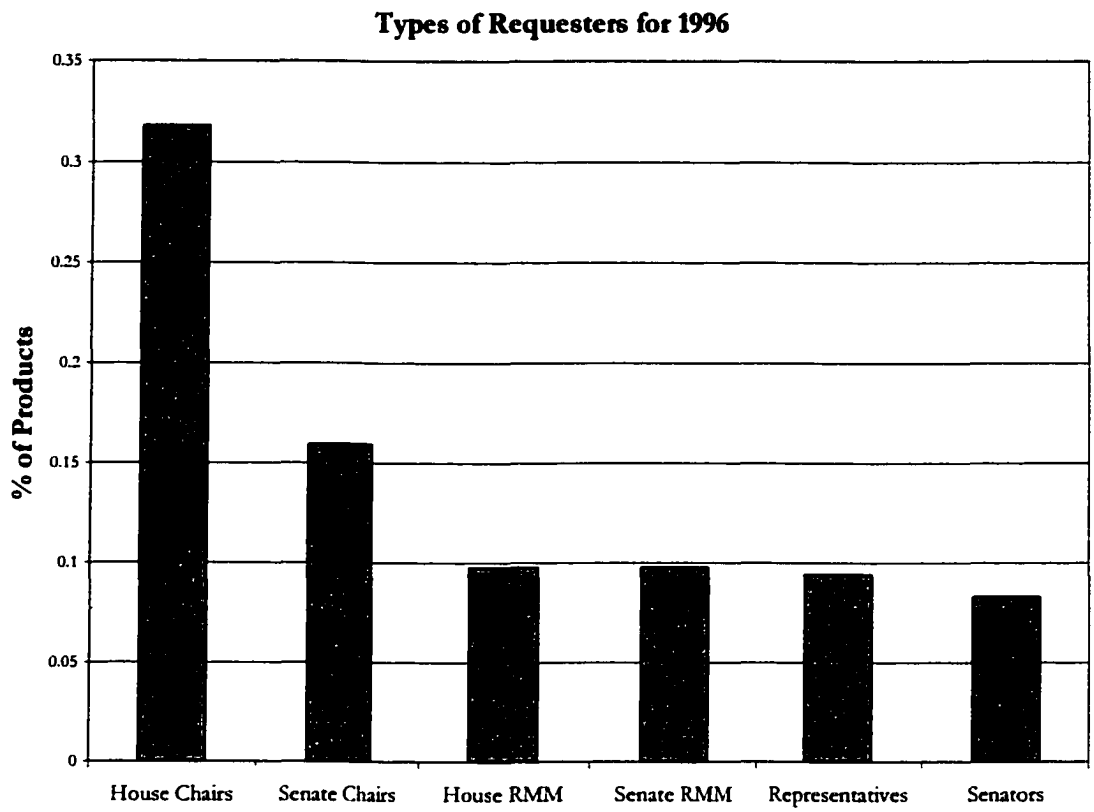
[42] See King et al. (2000). Because I own an older version of Stata, I could not use the CLARIFY (2001) program; I applied the same algorithms used in CLARIFY (2001).

Figure 3.3



N=944 (no missing data).
GAO Documents Database (all non-Testimony products) for 1990.

Figure 3.4



N=809 (no missing data).
GAO Documents Database (all non-Testimony products) for 1996.

From these two figures, it seems that Democrats request more studies than Republicans do. But Republican committee chairs signed onto a greater percentage of requests in 1996 than Republican ranking minority members did in 1990. To gain more systematic information, I ran a series of logit regressions on the same non-testimony data used in Tables 3.1 and 3.2 to examine which factors may influence whether a study is requested by particular types of members of Congress. Tables 3.3-3.6 present results for House

committee chairs, Senate committee chairs, House committee ranking minority members, and Senate committee ranking minority members, respectively. Tables 3.7 and 3.8 present several first differences for the regressions on House committee chairs and House committee ranking minority members.

House committee chairs are more likely to request a GAO study when the Democrats control the House, when government is divided, or when the study involves the Energy Department, the Interior Department, or the Transportation Department. They are less likely to sign onto a GAO request when a study involves the entire government, legislative agencies, the Housing and Urban Development Department, the Treasury Department, or the Veterans Affairs Department.[43] A shift in party control of the House (from the Democrats to Republicans) leads to a 4.6 percent decrease in the probability that a House committee chair will join a request. A change from united to divided government corresponds to a 5.68 percent increase in the request probability. This model provides some support for the theory that members in the majority use the GAO to investigate the bureaucracy when party control is divided among the branches.

Senate committee chairs are more likely to request a GAO product when the Democrats control the House, when the study covers more topics, or when

[43] Prior to 1989, when Veterans Affairs was not a cabinet department, this variable captures the Veterans Affairs Administration.

the product involves foreign countries or international associations, non-cabinet agencies, the Education Department, the Health and Human Services Department, or the Transportation Department. They are less likely to join a request that involves legislative agencies. This model does not support the institutional hypotheses. It appears that the House more actively uses the GAO than the Senate for bureaucratic oversight.

House committee ranking minority members are more likely to sign onto a request that affects private companies, the Agriculture Department, the Commerce Department, the Interior Department, the Labor Department, the State Department or the Transportation Department. They are also more likely to request a study when the Democrats control the Senate. They are less likely to turn to the GAO when there is divided government, when the Democrats control the House, or when the study involves the entire government, legislative agencies, non-cabinet agencies, the Defense Department or the Housing and Urban Development Department. A shift in party control of the House (from the Democrats to Republicans) leads to a 6.02 percent increase in the probability that a committee ranking minority member will request a product. The difference from united to divided government corresponds to a 2.16 percent decrease in the request probability. Like the model on House committee chairs, this model provides some support for the institutional

theories. As expected, House minority members are less likely to task the GAO to investigate agencies when their party controls the executive branch.

Senate committee ranking minority members are more likely to ask for a GAO product that affects the Energy Department, the Health and Human Services Department, the Transportation Department, or the Veterans Affairs Department. They are less likely to sign onto a GAO request if the report involves many subjects, when the Democrats control the House, or when the study involves legislative agencies, the Defense Department, or the Labor Department. Like the model on Senate committee chairs, this model does not support an oversight theory based on divided government. From all four models, it seems that members of Congress do not ask the GAO to investigate legislative agencies. This seems rather intuitive; it would be strange for members of Congress to turn the GAO on themselves.

Table 3.3: Logit (GAO Requests by House Committee Chair, 1986-1997)

PAGES	-4.18E-4 (5.56E-4)	**ENERGY DEPARTMENT**	0.41*** (0.08)
SCOPE	0.03* (0.01)	**HEALTH & HUMAN SERV'S DEPARTMENT**	-0.13 (0.07)
# OF EXECUTIVE ENTITIES	-0.08 (0.07)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.31** (0.13)
# OF GOV'T WIDE ENTITIES	-0.41*** (0.13)	**INTERIOR DEPARTMENT**	0.54*** (0.10)
# OF STATES OR STATE ENTITIES	-0.07 (0.05)	**JUSTICE DEPARTMENT**	0.05 (0.10)
# OF PRIVATE COMPANIES	-0.04 (0.04)	**LABOR DEPARTMENT**	0.17 (0.12)
# OF INT'L ORGS OR COUNTRIES	-0.01 (0.05)	**STATE DEPARTMENT**	0.04 (0.09)
# OF JUDICIAL ENTITIES	-0.15 (0.19)	**TRANSPORTATION DEPARTMENT**	0.21** (0.08)
# OF LEGISLATIVE ENTITIES	-0.52*** (0.10)	**TREASURY DEPARTMENT**	-0.43*** (0.11)
# OF NON-CAB. AGENCIES	0.04 (0.03)	**VET AFFAIRS AGENCY OR DEPARTMENT**	-0.63*** (0.14)
AGRICULTURE DEPARTMENT	-0.09 (0.08)	**HOUSE CONTROL**	2.24*** (0.43)
COMMERCE DEPARTMENT	0.01 (0.11)	**SENATE CONTROL**	-0.16 (0.55)
DEFENSE DEPARTMENT	-0.06 (0.05)	**DIVIDED GOVERNMENT**	0.25*** (0.06)
EDUCATION DEPARTMENT	-0.03 (0.13)	**LEGAL AUTHORITY**	-0.22*** (0.05)

N=10750 (1 observation deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997. *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=322.28***. Constant: -1.10*** (s.e. 0.15). Pseudo R^2 =0.02.

Table 3.4: Logit (GAO Requests by Senate Committee Chair, 1986-1997)

PAGES	-7.75E-5 (6.55E-4)	**ENERGY DEPARTMENT**	-0.08 (0.10)
SCOPE	0.03* (0.02)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.15* (0.08)
# OF EXECUTIVE ENTITIES	-0.08 (0.08)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.15 (0.15)
# OF GOV'T WIDE ENTITIES	0.18 (0.15)	**INTERIOR DEPARTMENT**	0.05 (0.12)
# OF STATES OR STATE ENTITIES	0.03 (0.06)	**JUSTICE DEPARTMENT**	0.05 (0.12)
# OF PRIVATE COMPANIES	-2.07E-3 (0.05)	**LABOR DEPARTMENT**	-0.14 (0.14)
# OF INT'L ORGS OR COUNTRIES	0.16*** (0.05)	**STATE DEPARTMENT**	-0.08 (0.11)
# OF JUDICIAL ENTITIES	0.17 (0.20)	**TRANSPORTATION DEPARTMENT**	0.22** (0.10)
# OF LEGISLATIVE ENTITIES	-0.89*** (0.18)	**TREASURY DEPARTMENT**	-0.17 (0.13)
# OF NON-CAB. AGENCIES	0.07** (0.03)	**VET AFFAIRS AGENCY OR DEPARTMENT**	-0.17 (0.14)
AGRICULTURE DEPARTMENT	-0.02 (0.09)	**HOUSE CONTROL**	2.51*** (0.53)
COMMERCE DEPARTMENT	0.19 (0.12)	**SENATE CONTROL**	-0.98 (0.66)
DEFENSE DEPARTMENT	-0.07 (0.06)	**DIVIDED GOVERNMENT**	0.06 (0.07)
EDUCATION DEPARTMENT	0.33** (0.14)	**LEGAL AUTHORITY**	-0.19*** (0.05)

N=10750 (1 observation deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997. *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=139.15***. Constant:-1.99*** (s.e. 0.18). Pseudo R^2 =0.01.

Table 3.5: Logit (GAO Requests by House Committee RMM, 1986-1997)

PAGES	2.76E-3*** (8.87E-4)	**ENERGY DEPARTMENT**	-0.11 (0.17)
SCOPE	0.02 (0.03)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.12 (0.13)
# OF EXECUTIVE ENTITIES	-0.01 (0.13)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.62** (0.29)
# OF GOV'T WIDE ENTITIES	-0.55* (0.29)	**INTERIOR DEPARTMENT**	0.34* (0.18)
# OF STATES OR STATE ENTITIES	-0.16 (0.13)	**JUSTICE DEPARTMENT**	-0.25 (0.20)
# OF PRIVATE COMPANIES	0.15*** (0.05)	**LABOR DEPARTMENT**	0.41** (0.19)
# OF INT'L ORGS OR COUNTRIES	0.02 (0.07)	**STATE DEPARTMENT**	0.32** (0.16)
# OF JUDICIAL ENTITIES	0.14 (0.27)	**TRANSPORTATION DEPARTMENT**	0.56*** (0.14)
# OF LEGISLATIVE ENTITIES	-0.41* (0.21)	**TREASURY DEPARTMENT**	-0.10 (0.21)
# OF NON-CAB. AGENCIES	-0.12** (0.05)	**VET AFFAIRS AGENCY OR DEPARTMENT**	-0.29 (0.25)
AGRICULTURE DEPARTMENT	0.39*** (0.13)	**HOUSE CONTROL**	-6.04*** (0.98)
COMMERCE DEPARTMENT	0.36** (0.18)	**SENATE CONTROL**	2.81** (1.36)
DEFENSE DEPARTMENT	-0.47*** (0.11)	**DIVIDED GOVERNMENT**	-0.39*** (0.12)
EDUCATION DEPARTMENT	-0.04 (0.23)	**LEGAL AUTHORITY**	-0.02 (0.09)

N=10750 (1 observation deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997.*** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=248.32***. Constant: -2.06*** (s.e. 0.31). Pseudo R^2 =0.05.

Table 3.6: Logit (GAO Requests by Senate Committee RMM, 1986-1997)

PAGES	3.05E-3*** (8.81E-4)	**ENERGY DEPARTMENT**	0.63*** (0.14)
SCOPE	-0.07** (0.03)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.69*** (0.12)
# OF EXECUTIVE ENTITIES	-0.09 (0.14)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.42 (0.28)
# OF GOV'T WIDE ENTITIES	-0.01 (0.25)	**INTERIOR DEPARTMENT**	-0.10 (0.23)
# OF STATES OR STATE ENTITIES	-1.22E-3 (0.10)	**JUSTICE DEPARTMENT**	-0.14 (0.21)
# OF PRIVATE COMPANIES	0.08 (0.07)	**LABOR DEPARTMENT**	-0.45* (0.26)
# OF INT'L ORGS OR COUNTRIES	0.08 (0.07)	**STATE DEPARTMENT**	-0.30 (0.21)
# OF JUDICIAL ENTITIES	0.34 (0.24)	**TRANSPORTATION DEPARTMENT**	0.55*** (0.15)
# OF LEGISLATIVE ENTITIES	-0.92** (0.35)	**TREASURY DEPARTMENT**	-0.03 (0.22)
# OF NON-CAB. AGENCIES	-0.04 (0.06)	**VET AFFAIRS AGENCY OR DEPARTMENT**	0.65*** (0.20)
AGRICULTURE DEPARTMENT	-0.25 (0.17)	**HOUSE CONTROL**	-5.46*** (0.92)
COMMERCE DEPARTMENT	-0.15 (0.24)	**SENATE CONTROL**	2.08 (1.28)
DEFENSE DEPARTMENT	-0.23** (0.11)	**DIVIDED GOVERNMENT**	0.17 (0.14)
EDUCATION DEPARTMENT	-0.12 (0.25)	**LEGAL AUTHORITY**	0.29** (0.10)

N=10750 (1 observation deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997. *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=322.28***. Constant: -2.25*** (s.e. 0.32). Pseudo R^2 =0.06.

Table 3.7: First Differences for House Committee Chair Requests[44]

Variable	X_1	X_2	%ΔP(request)
CONTROL OF HOUSE	0.05 (Democratic)	-0.05 (Republican)	-4.60% (0.76)
DIVIDED GOVERNMENT	0 (absence)	1 (presence)	5.68% (1.30)

Table 3.8: First Differences for House Committee RMM Requests[45]

Variable	X_1	X_2	%ΔP(request)
CONTROL OF HOUSE	0.05 (Democratic)	-0.05 (Republican)	6.02% (1.60)
DIVIDED GOVERNMENT	0 (absence)	1 (presence)	-2.16% (0.70)

The above analysis focuses on how members of Congress might use the GAO to "counter" particular institutional arrangements. But members of Congress might also use the GAO to help their chances for reelection. In particular, senators facing election sooner might request more studies to appear vigilant to voters with short-term memories. Using the data from FY 1996, I counted how many studies each senator requested (either as an individual or in a committee leadership position). Table 3.9 presents the average number of

[44] See King et al. (2000).

[45] Id.

requests for the three electoral classes of the Senate.[46] Senators facing election sooner, on average, request more studies overall than senators facing election in later cycles. Of course, this analysis does not control for a variety of other factors that likely influence whether a Senator requests a study.

Table 3.9: Average Number of Requests by Senate Classes for FY 1996

Class	Average Chairs, RMM	Average Individual	Average Total
Senators up in 1996	**3.33**	**1.18**	**4.52**
Senators up in 1998	**2.18**	**1.44**	**3.62**
Senators up in 2000	**1.18**	**0.97**	**2.15**

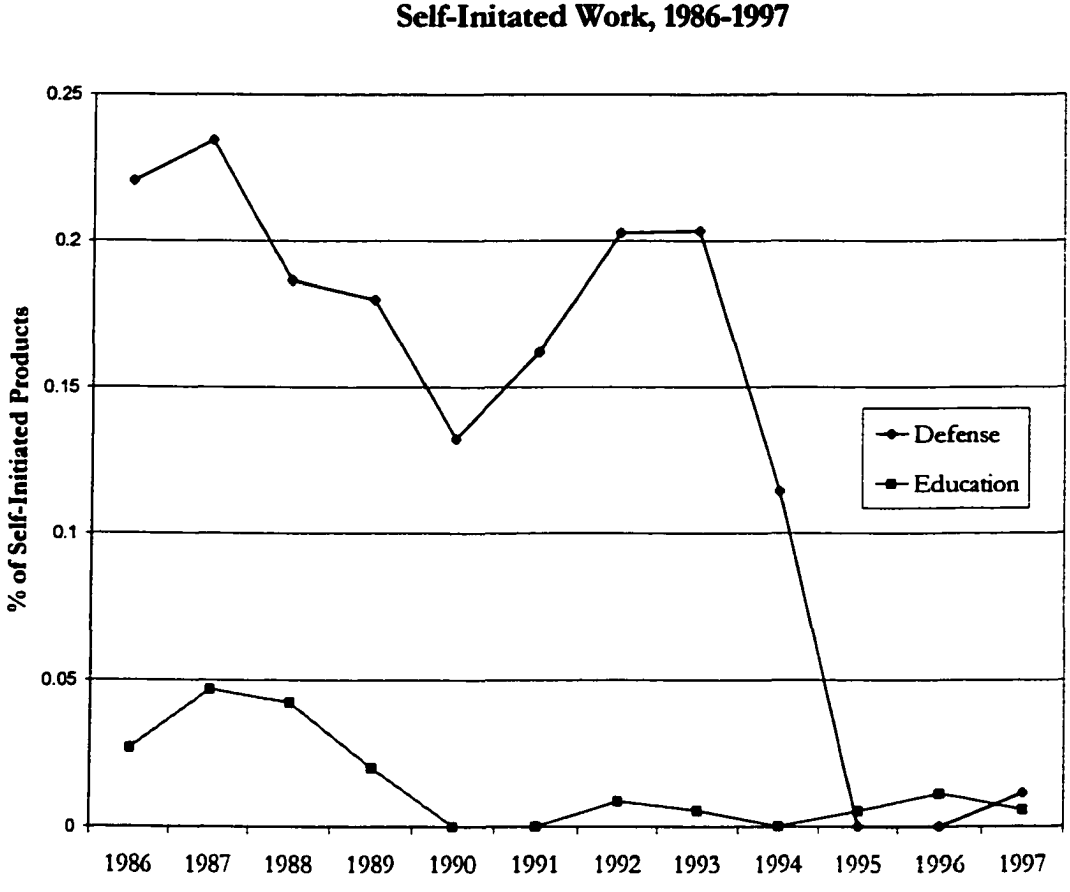
C. Results on Self-Initiated Work

The GAO Documents Database also provides information about the products issued with no congressional request or legislative mandate. In particular, it is possible to chart the percentage of self-initiated work by subject or budget area. Using the 1986-1997 data, when the percentage of self-initiated work of all products was relatively constant, I examine trends in two partisan areas, national defense and education. In this time period, Democrats (as committee chairs or ranking minority members) used 18.3 percent of their requests to ask for studies assigned a national defense budget code and 3.9

[46] A class includes all senators up for reelection in a particular election cycle, including those Senators who decided to retire instead of face reelection.

percent of their requests to ask for studies assigned an education budget code. Republicans, in contrast, used 9.7 percent of their requests to ask for defense studies and 5.2 percent of their requests for education products.[47] Figures 3.5 charts the percentage of GAO's self-initiated work in these two areas in this time period.

Figure 3.5



N=1897 (no missing data).
GAO Documents Database (all non-Testimony products) for 1986-1997.

[47] Between 1986 and 1997, Democrats as committee chairs or ranking minority members signed onto 4654 requests; Republicans signed onto 2072 requests.

After the Republicans gained control of Congress in the 1994 elections, the GAO performed almost no defense investigations on its own initiative, after devoting a considerable percentage of its work to defense studies before the election. To the extent that Republicans support national defense programs, the GAO seems to have chosen work that would be pleasing to the majority that controls its budget and oversees its activities. One GAO analyst suggested that Defense Department projects remain of interest to many members of Congress, despite defense cutbacks after the Cold War, because of ties of military bases or employees to a member's district. But the GAO essentially did not investigate such projects without a request after 1994. Despite this trend in national defense products, the GAO did not substantially increase its education-related work after the election, despite education being considered, at least prior to President George W. Bush's administration, more of a Democratic issue area. Such trends at least appear weakly consistent with the hypotheses on the GAO's self-initiated work.

In addition to choosing which projects to examine without a congressional request, the GAO decides whether to issue recommendations to Congress or to any concerned agency, whether the product is congressionally requested or not. Under Comptroller General Bowsher's tenure (1981-1996),

the GAO cut back on issuing recommendations.[48] But the GAO did not stop issuing recommendations, either to Congress or to administrative agencies, entirely. Once the GAO issues one recommendation, it seems likely that it would issue additional recommendations.[49] I ran negative binomial regressions on the number of recommendations made to Congress and to any targeted administrative agency. Tables 3.10 and 3.11 present results from these two regressions.

The GAO makes more recommendations to Congress when the study is requested, when Republicans control the House, when the Democrats control the Senate, when the report covers more subjects, when the report cites a greater number of legal authorities, or when the GAO has already made findings. A study impacting executive offices, legislative agencies, the Defense Department, the Education Department, the Health and Human Services Department, or the Treasury Department also has a greater chance of having more recommendations to Congress. Divided government is surprisingly not significant. But the GAO does seem to use its power to issue

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[48] Trask (1996).

[49] I performed Likelihood Ratio tests comparing the Negative Binomial model to the Poisson model: $\chi^2=1900.267^{***}$ for recommendations to Congress and $\chi^2=10354.92^{***}$ for recommendations to Agencies. *** $p \leq 0.01$

recommendations strategically. Work that is self-initiated is less likely to include recommendations.

The GAO proposes more recommendations to agencies when the project is self-initiated, when the report is longer, when the report covers more subjects, when the report cites more legal authorities, or when the GAO has already made findings. A study concerning non-cabinet agencies, offices of the President, the Defense Department, the State Department, the Transportation Department, or the Veterans Affairs Department is also more likely to have more recommendations. It makes fewer recommendations when government is divided or when the Comptroller General has personally signed off on the product. The results concerning divided government and the signature of the Comptroller General are somewhat confusing. If the GAO is worried about criticism, it should be more fearful of united criticism. The signature of the Comptroller General signals that a product is perceived to be quite important. I would expect the GAO to issue recommendations in its most visible work. Nevertheless, the signature could also be a proxy for a controversial product and perhaps the GAO holds off on issuing recommendations in its most contentious studies.

Table 3.10: Negative Binomial (Recs to Congress, 1986-1997)

REQUEST	0.29** (0.12)	**# OF JUDICIAL ENTITIES**	-1.00 (0.63)
DIVIDED GOVERNMENT	-6.89E-3 (0.11)	**# OF LEGISLATIVE ENTITIES**	0.30*** (0.11)
HOUSE CONTROL	-1.78* (0.96)	**# OF NON-CAB. AGENCIES**	-0.04 (0.05)
SENATE CONTROL	4.00*** (1.23)	**COMMERCE DEPARTMENT**	-0.23 (0.22)
PAGES	0.02*** (1.25E-3)	**DEFENSE DEPARTMENT**	0.29*** (0.10)
SCOPE	0.17*** (0.03)	**EDUCATION DEPARTMENT**	0.78*** (0.20)
LEGAL AUTHORITY CITED	0.68*** (0.10)	**ENERGY DEPARTMENT**	-0.31* (0.17)
FINDINGS MADE	2.73*** (0.35)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.46*** (0.13)
COMPTROLLER GEN. SIGNATURE	-0.13 (0.16)	**HOUSING & URBAN DEV. DEPARTMENT**	0.16 (0.23)
# OF EXECUTIVE ENTITIES	0.26** (0.12)	**LABOR DEPARTMENT**	-0.09 (0.21)
# OF GOV'T WIDE ENTITIES	-0.24 (0.24)	**STATE DEPARTMENT**	-0.30 (0.18)
# OF STATES OR STATE ENTITIES	-0.14 (0.10)	**TRANSPORTATION DEPARTMENT**	0.24 (0.16)
# OF PRIVATE COMPANIES	-0.16* (0.09)	**TREASURY DEPARTMENT**	0.89*** (0.17)
# OF INT'L ORGS OR COUNTRIES	-0.04 (0.07)	**VET AFFAIRS AGENCY OR DEPARTMENT**	0.20 (0.23)

N=10749 (3 observations deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997. *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=647.76***. Constant: -7.77*** (s.e. 0.47). Pseudo R^2 =0.08. Variables for the Departments of Agriculture, Interior and Justice were also included.

Table 3.11: Negative Binomial (Recs to Agencies, 1986-1997)

REQUEST	-0.56*** (0.06)	**# OF JUDICIAL ENTITIES**	-0.04 (0.15)
DIVIDED GOVERNMENT	-0.18*** (0.06)	**# OF LEGISLATIVE ENTITIES**	-0.34*** (0.11)
HOUSE CONTROL	0.69 (0.45)	**# OF NON-CAB. AGENCIES**	0.13*** (0.03)
SENATE CONTROL	0.15 (0.55)	**COMMERCE DEPARTMENT**	-0.23** (0.11)
PAGES	0.02*** (7.48E-4)	**DEFENSE DEPARTMENT**	0.30*** (0.05)
SCOPE	0.14*** (0.01)	**EDUCATION DEPARTMENT**	-0.48*** (0.13)
LEGAL AUTHORITY CITED	0.32*** (0.05)	**ENERGY DEPARTMENT**	-0.10 (0.08)
FINDINGS MADE	2.66*** (0.13)	**HEALTH & HUMAN SERV'S DEPARTMENT**	0.07 (0.07)
COMPTROLLER GEN. SIGNATURE	-0.80*** (0.09)	**HOUSING & URBAN DEV. DEPARTMENT**	-0.43*** (0.13)
# OF EXECUTIVE ENTITIES	0.22*** (0.07)	**LABOR DEPARTMENT**	-0.47*** (0.12)
# OF GOV'T WIDE ENTITIES	-1.24*** (0.15)	**STATE DEPARTMENT**	0.40*** (0.09)
# OF STATES OR STATE ENTITIES	-0.18*** (0.06)	**TRANSPORTATION DEPARTMENT**	0.22*** (0.08)
# OF PRIVATE COMPANIES	-0.13*** (0.04)	**TREASURY DEPARTMENT**	-0.05 (0.10)
# OF INT'L ORGS OR COUNTRIES	-0.39*** (0.07)	**VET AFFAIRS AGENCY OR DEPARTMENT**	0.32*** (0.12)

N=10750 (2 observations deleted due to missing data). GAO Documents Database (all non-Testimony products) for 1986-1997. *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. χ^2=1746.29***. Constant: -4.18*** (s.e. 0.19). Pseudo R^2 =0.06. Variables for the Departments of Agriculture, Interior and Justice were also included.

VI. Proposed Extensions and Conclusion

The statistical work presented in this essay is preliminary. It could be extended in two primary directions. First, the analysis concerning what motivates members and committees of Congress to request oversight studies could be refined. Second, more information about the internal structure of the GAO to capture additional sources of motivation for self-initiated work could be developed. There are also troubling counterfactual issues, which deserve more consideration. It is unclear what options members of Congress consider when they decide to request a particular study. Likewise, it is unclear what options the GAO contemplates when it evaluates a program without a congressional request.

For congressional requests, the statistical analysis could be significantly strengthened. It would be interesting to analyze to what extent the GAO functions as a "court of last resort" for disgruntled policy makers or minority players. Do members who are on the losing side of a legislative battle on policy formation use audits at a later point to seek revenge? By merging the recoded GAO Documents Database with data on important roll call votes, agency budget information, biographical characteristics of members of Congress, and demographic information on congressional districts,[50] one could examine the

[50] See Lublin (1994). Lublin uses the following demographic information on congressional districts: median family income, proportion black, proportion

effect of tax burdens, district demographics, policy expertise, timing of elections, size of agency budgets, workloads, and size of congressional staff on the number of requests by individual members and committees.

For self-initiated work, it would be worthwhile to consider to what extent internal career concerns and turf battles of GAO workers affect their choice of projects. In my interviews with GAO officials, many people indicated that employees who desire promotions want to "rack up" trips to the Hill to testify and also try to find tangible amounts of money that can be saved from policy programs for which they can take credit.

Although considerable sophisticated theoretical and empirical work remains, this essay tries to make several contributions to the American bureaucracy literature. First, members of Congress appear to use the GAO to advance particular partisan and electoral objectives. Second, the GAO operates in a highly charged political environment even when conducting investigations on its own initiative. The "monitors" of the monitor of the bureaucracy want auditing that aligns with their objectives, and the monitor of the bureaucracy tends to deliver. The GAO devotes considerable resources to obtaining and analyzing information. Because this information does not exist in a vacuum

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latino, proportion urban, proportion elderly, proportion high school graduates, state, and party affiliation of member.

but rather has political costs and benefits, its development should be considered in any study of bureaucratic oversight.

Appendix 3.A: Interviews of GAO Officials

In September 1997, I conducted two days of face-to-face interviews with GAO officials (including the Acting Comptroller General, an Assistant Comptroller General, several Issue Area Directors or Associate Directors, and the Director of the Office of Congressional Relations) and one day of phone interviews with a former Assistant Comptroller General.

I did not plan to analyze formally the information gathered from these interviews. But I tried to ask the same questions in each interview. I performed the interviews to help modify my initial theories, formulate new propositions, and identify other interesting data to add to the GAO Documents Database.

I was interested in obtaining a range of reactions and responses to the following set of questions:

(1) How much discretion does the GAO have in accepting, revising or rejecting congressional requests? The GAO must respond to committee requests and tries to answer most individual member queries. How many individual requests are not answered? How does the GAO decide whether to answer a request from an individual member? Do individual members become known for particular "issues" in their relations with the GAO? Does each person have an informal limit on the number of requests that can be completed? How does the GAO discipline

legislators? To what extent can the GAO modify the scope of committee requests? How does such negotiation take place for the tasking of work? To what extent does the GAO know what will be congressionally requested? How often does the GAO "shop" topics of investigation to members of Congress?

(2) How does the GAO decide which projects to pursue on its own? From where do ideas for possible projects come? What criteria are used in selecting projects? How centralized is the selection process?

(3) What motivates the GAO in selecting projects, in making recommendations, in battling opponents? What is the "official" line on the GAO's mission? In practice, what goals does the GAO advance? What steps does the GAO take to mitigate conflict over recommendations? Who are the opponents to the GAO's work? How much does the GAO adjust its reports because of political pragmatism?

(4) How does the GAO function in reality as an organization? How much flexibility do individual divisions or regional offices have in choosing and completing projects? To what extent are recommendations modified at higher levels of review? How do GAO employees get promoted within the organization?

(5) What roles does the GAO play in the policy process? Is this constant across topics? How do members of Congress use the GAO to advance their objectives? Does the GAO have to maintain a particular reputation?

(6) How does the GAO respond to changes in administration, party leadership in Congress, and the office of Comptroller General? Does the identity of the Comptroller General or President impact the choice and conclusions of projects? What changes were made after the Republicans gained control of Congress in 1994? Why was the GAO's budget cut by 25 percent?

(7) Explain to interviewee the fire alarm-police patrol model of McCubbins and Schwartz (1984). In what ways does the GAO function as police patrol oversight? In what ways does the GAO provide fire alarm oversight?

Appendix 3.B: Data

1. Number of Documents

The GAO Documents Database contains information on all unclassified GAO reports and testimony to Congress for Fiscal Years 1978-1999. It does not include information on GAO adjudicated decisions (e.g., bidding disputes by contractors). The numbers differ slightly from those reported in annual reports of the GAO due to the types of products included in both measures. Table 3.12 lists the number of products for each fiscal year in the database.

Table 3.12: Number of Products in GAO Documents Database, FY 1978-1999

FISCAL YEAR	PRODUCTS
1978	1381
1979	1164
1980	1141
1981	1208
1982	1106
1983	903
1984	760
1985	691
1986	1015
1987	909
1988	1065
1989	1075
1990	1289
1991	1229
1992	1390
1993	1209
1994	1160
1995	1149
1996	1017
1997	1013
1998	1215
1999	1107

2. Description of Variables in the GAO Documents Database[51]

Table 3.13 provides the variable descriptions for the GAO Documents Database.

Table 3.13: Variables in GAO Documents Database, FY 1978-1999

FIELD LABELS	DESCRIPTION
TITLE:	Actual title of product except for those surrounded by brackets ([ ]) which were "invented" as brief descriptions in the absence of a title.
ACCESSION NUMBER:	Unique key assigned to each document. Always 6 digits.
RPTNO:	GAO-assigned report, testimony, or statement for the record number as printed on a product. Many reports and testimonies in the 1970s and early 1980s do not have this number.
BNUMBER:	GAO-assigned correspondence number.
DOCUMENT DATE:	Document issue date. Formats: mm/dd/yy or mm/yy or yy.
DOCUMENT TYPE:	Product type descriptor.
PAGINATION:	Page count specifying the number of appendices, enclosures, and attachments.
GAO DIVISION/OFFICE:	Issuing GAO organization.
SUBJECT TERMS:	GAO Thesaurus descriptors assigned to each GAO product during the indexing and abstracting process.
IDENTIFIERS:	Names of places, programs, pending legislation, or other identifiable entities that are addressed within document.
ORGANIZATION CONCERNED:	Public and private sector entities significant to a document.
PRIMARY BUDGET FUNCTION:	Portion of Office of Management and Budget code assigned to document by GAO to indicate activity as a defined area of budgetary concern.

[51] Lockheed Martin, the contractor that maintains the GAO Documents Database, provided these descriptions.

Table 3.13 (Continued)

BUDGET FUNCTION(S):	Portion of Office of Management and Budget code assigned to document by GAO to indicate activity as a secondary defined area of budgetary concern.
PRIMARY ISSUE AREA:	Assigned by GAO to indicate activity in a defined line of effort. Used in the job tracking process.
ISSUE AREA(S):	Assigned by GAO to indicate activity as a secondary line of effort. Used in the job tracking process.
LAW AUTHORITY:	Legal authority (law names or numbers, court cases, regulations, administrative or executive orders or decisions, treaties, etc.) cited in document.
ADDRESSEE INFORMATION:	Individual, office, or organization to which a product has been addressed.
CONGRESSIONAL RELEVANCE:	Name of member of Congress or congressional organization: - requesting GAO perform the work resulting in the document, or - discussed or referenced in document, or - to which a document was addressed.
SIGNATORY	Name of GAO Official under whose signature product is released
REQUESTER INFORMATION:	Individual, office, or organization requesting that GAO perform the work resulting in the document.
ABSTRACT:	Brief description of the document written by GAO's Office of Public Affairs, comparable to a press release.
BACKGROUND:	Brief description of the purpose of the document.
FINDINGS:	Summary of the findings and conclusions reported in a document.
RECOMMENDATIONS TO CONGRESS:	Lists each recommendation made to Congress, congressional committees, or legislative branch agencies.
RECOMMENDATIONS TO AGENCIES:	Lists each recommendation made to any other entity (Almost always to executive branch/independent agencies and judicial branch agencies).

3. Required Recoding of Data

The records from the GAO Documents Database are primarily in text form. Fortunately, the fields appear in fixed locations within each record. With the use of Perl (a programming language ideal for pattern matching), the following recoding was automated. Descriptive statistics of many of the variables are provided in Table 3.14.

a. DOCUMENT DATE

Since virtually all observations have a month and year recorded, I recoded this field into a YEAR variable and a MONTH variable. The YEAR variable is the last two digits of the year when the document appeared. The MONTH variable is the number of the month in the year.

b. DOCUMENT TYPE

I recoded the document type as follows:

DOCTYPEN	=1	if Staff Study
	=2	if Financial Statement or Audit Report
	=3	if Management Letter
	=4	if Correspondence
	=5	if Fact Sheet
	=6	if Briefing Report
	=7	if Letter Report
	=8	if Chapter Report
	=9	if Special Study
	=10	if Guidance
	=11	if Testimony
	=12	if other Statement
	=999	if not listed above

c. PAGINATION

I recoded this field into PAGESMAIN (number of pages in main part of document), PAGESAPP (number of pages in appendices and enclosures) and PAGESALL (sum of PAGESMAIN and PAGESAPP).

d. GAO DIVISION OR OFFICE

I recoded this field as follows:

GAOFFICE = 1	if General Government
GAOFFICE = 2	if Health, Education, or Human Services
GAOFFICE = 3	if National Security, International Affairs, Mission Analysis, Systems Acquisition, Procurement, Logistics, Readiness, Defense, or Military
GAOFFICE = 4	if Resources, Community, or Economic Development
GAOFFICE = 5	if Program Evaluation, Methodology, or Program Analysis
GAOFFICE = 6	if Accounting, Information Management, Financial Management, Technology, General Management, or Information Systems
GAOFFICE = 7	if Special Investigations
GAOFFICE = 8	if General Counsel
GAOFFICE = 9	if Policy or Program Planning
GAOFFICE = 10	if Energy or Minerals
GAOFFICE = 11	if Personnel, Compensation, or Human Resources
GAOFFICE = 12	if Field Operations or any of the regional offices
GAOFFICE = 13	if Comptroller General
GAOFFICE = 14	if Chief Economist
GAOFFICE = 15	if ADP Services
GAOFFICE = 16	if Publishing or Communications
GAOFFICE = 17	if Professional Audit
GAOFFICE = 18	if Claims Division

e. SUBJECTS

I recoded this field into SUBNUM (number of subjects covered by a document).

f. ORGANIZATION CONCERNED

I recoded this field into a series of variables to count the number of particular organizations addressed in a document:

ORGNUM	=	Number of organizations
ORGEXEC	=	Number of non-cabinet, non-agency Executive organizations (e.g., EOP)
ORGCAB	=	Number of cabinet organizations
ORGGVT	=	Number of larger government institutions (e.g. general government)
ORGSTATE	=	Number of states
ORGPRIVATE	=	Number of private entities
ORGINTL	=	Number of international entities (e.g., UN or World Bank) or foreign countries
ORGAGENCY	=	Number of non-cabinet executive agencies
ORGJUD	=	Number of judicial institutions
ORGLEG	=	Number of legislative institutions
ORGOTHER	=	Number of other organizations

I also created a series of dummy variables for any specific cabinet department involved: AGRIC, COMMERCE, DEFENSE, EDUC, ENERGY, HEALTH, HOUSING, INTERIOR, JUSTICE, LABOR, STATE, TRANSPORT, TREASURY, VETS.

g. PRIMARY BUDGET FUNCTION

Because assigned budget functions match primary policy fields (national defense; international affairs; general science, space and technology; energy; natural resources and the environment; agriculture; commerce and housing credit; transportation; community and regional development; education, training, employment and social services; health; income security; veterans

benefits and services; administration of justice; general government; general purpose fiscal assistance; interest; allowances; undistributed offsetting receipts; and financial management and information systems), I created the following dummy variables from this field:

COMMDEV	= 1	if Community and Regional Development
EDUCAT	= 1	if Education, Training, Employment and Social Services
HEALTH	= 1	if Health
INCOME	= 1	if Income Security
JUSTICE	= 1	if Justice/Crime
NATDEFENSE	= 1	if Defense
SCIENCE	= 1	if Science, Space and Technology

h. LAW AUTHORITY

I counted the number of citations to legal authority (e.g., pieces of legislation, court cases) in LAWNUM and then created a dummy variable LEGAUTH if LAWNUM > 0.

i. SIGNATORY

I recoded this field into a dummy variable CGSIGN indicating whether the Comptroller General (Staats, Bowsher, Walker) or an acting Comptroller General (Hinchman) signed the document.

j. REQUESTER INFORMATION

I recoded this field into a series of more detailed variables if applicable:

REQUESTG	= 1 if Congressionally requested
CHAIRREP	= Number of House committee chairs on request
CHAIRSEN	= Number of Senate committee chairs on request
RMMREP	= Number of House committee Ranking Minority Members (RMM) on request

RMMSEN = Number of Senate committee RMMs on request
SINGREP = Number of individual Representatives on request
SINGSEN = Number of individual Senators on request

I then created a matching set of dummy variables for these categories.

k. BACKGROUND

I recoded this field into variables indicating whether the product was mandated by law and then created a general congressional request variable:

LEGREQ = 1 if legally mandated work
REQUEST = 1 if LEGREQ = 1 or REQUESTG = 1

l. FINDINGS

I recoded this field into FINDINGS (number of findings).

m. RECOMMENDATIONS TO CONGRESS

For testimony to Congress, recommendations are contained within the BACKGROUND field. For other products, the variable CTRECSC represents the number of recommendations made to Congress.

n. RECOMMENDATIONS TO AGENCIES

The variable CTRECSA represents the number of recommendations made to agencies.

4. Additional Data

The data set includes products issued in a variety of political contexts. To reflect the partisan control of Congress, I defined political variables to reflect the relative weight of Republicans and Democrats in the House (HOUSE) and the Senate (SENATE). Each variable is defined by the

difference between the number of Democrats and Republicans, which is then divided by the total number of Republicans and Democrats. All numbers are taken from the year the product was issued and do not reflect any registered Independents. A positive value indicates Democratic control; a negative value indicates Republican control. An alternative would be to use various estimates of median ideology in a particular legislative chamber. To reflect the President (and applicable term) when a report was issued, I created a series of dummy variables: CARTER, REAGAN1, REAGAN2, BUSH, CLINTON1, CLINTON2. I also created a dummy variable DIVIDE to indicate the presence of divided government.

Table 3.14: Descriptive Statistics of Non-Testimony Products, 1986-1997

VARIABLE	MEAN	STD. DEV.
PAGES	33.9585	39.2871
SUBNUM	8.6992	1.5049
ORGNUM	2.5554	2.2562
ORGEXEC	8.054E-02	.3137
ORGCAB	1.5442	1.7507
ORGGVT	3.041E-02	.1717
ORGSTATE	5.515E-02	.4092
ORGPRIV	.1122	.5538
ORGINTL	6.176E-02	.4406
ORGJUD	8.092E-03	.1159
ORGLEG	4.381E-02	.2948
ORGAGEN	.4339	.8050
ORGOTHER	.1855	.5906
CGSIGN	7.050E-02	.2560
REQUESTG	.7535	.4310
CHAIRREP	.4185	.6152
CHAIRSEN	.2137	.4710
RMMREP	6.817E-02	.2940
RMMSEN	5.776E-02	.2521
SINGREP	.2417	2.0474
SINGSEN	.1587	.7774
LEGREQ	6.724E-02	.2505
CTLAW	2.4445	3.8018
LEGAUTH	.6776	.4674
CTFINDNG	5.3403	3.6002
FINDINGS	.8817	.3230
CTRECSC	.1503	.7606
CTRECSA	1.0600	2.3603
REAGAN2	.2267	.4187
BUSH	.3652	.4815
CLINTON1	.3298	.4702
CLINTON2	7.822E-02	.2685
DIVIDE	.8255	.3795
SENATE	5.852E-02	8.813E-02
HOUSE	.1393	.1095

Table 3.14 (Continued)

VARIABLE	MEAN	STD. DEV.
AGRIC	8.138E-02	.2734
COMMERCE	3.897E-02	.1935
DEFENSE	.2722	.4451
EDUC	3.097E-02	.1732
ENERGY	6.817E-02	.2521
HEALTH	9.626E-02	.2950
HOUSING	2.958E-02	.1694
INTERIOR	4.362E-02	.2043
JUSTICE	4.874E-02	.2153
LABOR	3.506E-02	.1839
STATE	5.711E-02	.2321
TRANSPOR	5.999E-02	.2375
TREASURY	4.278E-02	.2024
VETS	3.218E-02	.1765

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