

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The Federal Civil Service System and The Problem of Bureaucracy

Volume Author/Editor: Ronald N. Johnson and Gary D. Libecap

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-40170-7

Volume URL: <http://www.nber.org/books/john94-1>

Publication Date: January 1994

Chapter Title: The "Problem of Bureaucracy"

Chapter Author: Ronald N. Johnson, Gary D. Libecap

Chapter URL: <http://www.nber.org/chapters/c8632>

Chapter pages in book: (p. 1 - 11)

## 1.1 Introduction

Cynicism about the federal bureaucracy is widespread. The general public views federal employees as aloof, uncaring bureaucrats who are unresponsive to their requests. Throughout the country, there is a prevailing sense that government is synonymous with inefficiency and waste and that the federal bureaucracy is essentially out of control. Discussions in both the academic and the popular press have focused on the issue of poor productivity and ways to make the bureaucracy more effective and responsive to voters in the provision of services.<sup>1</sup> Indeed, restructuring the federal bureaucracy so that it “works better and costs less” is a major objective of the Clinton administration.<sup>2</sup> In addition to concerns about worker productivity, presidents have also expressed serious misgivings about their ability to manage and direct the bureaucracy in the implementation of policy.<sup>3</sup> President Nixon, for example, felt that the bureaucracy was subverting his programs, and President Reagan repeatedly charged that big government was the problem, not the solution.

Despite all this attention and concern, antibureaucratic sentiments are longstanding, and few would claim that substantial progress has been made in addressing the problems of bureaucracy. From time to time, there have been attempts to reform the federal civil service through the installation of new personnel rules that would reward performance and allow for a greater degree of political control over the actions of federal employees. These efforts began in 1905 with President Theodore Roosevelt’s appointment of the Keep Committee to investigate ways of organizing the federal government more effectively; they were followed by President Taft’s 1912 Commission on Economy and Efficiency, President Franklin Roosevelt’s Brownlow Committee in 1936, President Truman’s Hoover Commission of 1949, a second Hoover Commission in 1953 under President Eisenhower, President Carter’s Reorganization Project of

1977, President Reagan's Private Sector Survey on Cost Control in 1982, and, most recently, President Clinton's National Performance Review.<sup>4</sup>

In each of these cases, recommendations have been made to provide incentives for productivity, to develop procedures for greater control of the bureaucracy, and to eliminate redundant programs and bloated staffs.<sup>5</sup> These efforts, however, have met with entrenched opposition, both from federal employee unions, which stress that civil service rules are in place to guard against a return to the evils of patronage, and from elected officials, who have been wary of implementing major changes in the federal personnel system.<sup>6</sup>

Besides performance, the other major problem of bureaucracy is a lack of accountability. Much of the current discussion of accountability has centered on the latitude available to administrative agencies for engaging in opportunistic behavior of their own in the implementation of congressional statutes and administration policies. Within the literature on this subject, there is debate as to how far agency officials can go in policy making to channel programs and services to favored constituents, to expand agency mandates and budgets, or to act on their personal preferences in ways that deviate from the desires of Congress and the president. Some authors view the federal bureaucracy as acting in self-interested ways to promote agency growth and budget maximization.<sup>7</sup> Other authors emphasize strategic alliances made among the bureaucracy and congressional committees that weaken presidential control of executive agencies and allow for opportunism (see Sayre 1965, 1–3; Kaufman 1965, 57–68). This problem has often been traced to the rise of professionalism in the civil service and the formation of close ties between agency officials and professional interest groups.

A parallel literature has developed regarding the ways in which Congress and the president attempt to constrain the discretionary actions of administrative officials, although congressional and presidential interests can, and often do, diverge. One avenue is through congressional committee oversight of specific agencies (see Weingast and Moran 1983; Gilligan and Krehbiel 1989). Another is through the budget appropriations process (see Fenno 1966; Wildavsky 1979; and Weingast and Moran 1983). A third is through systems of administrative rules for policy making, such as those outlined in the Administrative Procedures Act (60 Stat. 237 [and subsequent amendments]; see also Arnold 1979; McCubbins, Noll, and Weingast 1987; and Wilson 1989). Indeed, some argue that the intricate system of committee oversight, appropriations hearings, and administrative procedures provides a relatively short rein that does not allow federal bureaucrats to stray very far from the wishes of Congress (see, e.g., McCubbins, Noll, and Weingast 1987). Nevertheless, it is fair to say that much skepticism remains as to how much these institutions really constrain the bureaucracy.

In this book, we examine the persisting problem of bureaucracy. Our objective is to identify the forces that have molded the existing civil service system. The analysis offered reveals that, as the federal civil service system developed,

a permanent bureaucracy and a vast array of bureaucratic rules were created as the result of conscious decisions by successive politicians. The system was put into place incrementally through executive orders and statutes, following political negotiations among the president, members of Congress, and interest groups, particularly federal employees. Understanding why the federal civil service system has evolved in the way it has, with its well-known problems of productivity and accountability, requires attention to the objectives of elected officials and the confused political property rights that exist over the federal bureaucracy.

As we point out, the U.S. Constitution did not provide either the president or the Congress with clear authority over the federal bureaucracy. Hence, they have competed as rivals to direct the bureaucracy in different ways. In part, the civil service system has been designed to reduce the costs of competition over control of the bureaucracy. This rivalry, however, has also allowed federal employees to figure as a powerful additional interest in molding the civil service system. The book concludes that, given the forces underlying the civil service system, major institutional changes, such as adoption of the full list of programs suggested by the National Performance Review in 1993, is unlikely.

It is ironic that the current civil service system is, itself, a product of an earlier reform movement, one that was aimed at correcting conditions that are reminiscent of today's problems—a federal labor force that was inefficient, wasteful, and, seemingly, out of control. In the beginning, the federal civil service system was based on patronage, and reforms were sought by the president and the Congress to improve productivity in the provision of government services. Later, rules and sanctions were added to limit the president's and the Congress's access to the bureaucracy in order to shield bureaucrats from political manipulation and threats. These protections, however, reduced political control of the bureaucracy and facilitated the rise of federal employees as a third party, with a specific agenda for further structuring the civil service system. Despite the complaints of politicians about the functioning of the bureaucracy, much (but certainly not all) of the current arrangement is as they have wanted it and, indeed, as they have designed it. Recognizing this point helps make clear why meaningful change will be difficult to achieve.<sup>8</sup>

The shift from a patronage system to one of bureaucratic civil service rules was, in aggregate, a major institutional change, one that has important implications for the control and effectiveness of the government labor force. We argue that an analysis of the political economy of the origins and development of the civil service system is essential for understanding the rationale for the current arrangement and how it affects presidential and congressional authority over the bureaucracy and the performance of federal employees. Moreover, analysis of the gradual formation of the modern civil service system provides a case study of the mechanisms by which institutions are created and altered in the political arena. In general, these institutions can have profound implications for long-term economic growth.<sup>9</sup> Analyzing the historical development of the

civil service will help in understanding how the system, with all its apparent faults, came to be. Importantly, the analysis provides an explanation for why elected officials, who often run campaigns directed against the bureaucracy, do not support major reforms.<sup>10</sup>

## 1.2 Political Institutional Change

Until the early part of the twentieth century, most federal employees were hired on the basis of patronage. Patronage workers were expected to be politically active on behalf of their mentors by engaging in campaign work and other partisan activities and by contributing part of their salaries in the form of political assessments. Under patronage, federal workers did not have job tenure, and they were removed routinely after elections, whenever their political benefactors were defeated (see, e.g., Fish 1905; Fowler 1943). Patronage was a popular political institution that generated votes for federal politicians. It was viewed as a means of democratizing the government service. Thousands of individuals applied for positions in the federal government after every election, and the president allotted patronage appointments among members of Congress as a means of building support for administration policies. Once secured through such exchanges, patronage positions were awarded by members of Congress or local political machines to the party faithful as rewards for their partisan services. Under patronage, there was accountability. Loyalty and responsiveness to political mentors were the essential attributes of the contracts between patronage workers and politicians.

The shift from patronage to the current system began with the Pendleton Act of 1883 (22 Stat. 403), which authorized merit hiring for a small portion of the federal labor force. This shift was in response to the problems of administering a growing patronage labor force that had become increasingly corrupt and ineffective. Gradually, the system was extended and modified over the next hundred years, and ultimately it displaced patronage as the principal means of hiring and firing most federal civilian employees. By the 1980s, there were only about 5,000 political appointees in the federal service, less than 1 percent of total civilian employment (see Pfiffner 1987). The growth of the civil service system through presidential executive orders and congressional statutes, however, involved more than expanded coverage. It also involved the adoption of new rules and sanctions regarding work practices, compensation policies, promotion conditions, job tenure, and political activity by federal employees. As such, the civil service system that emerged over time provided the governance and incentive structure for the vast federal bureaucracy that exists today.

It is our contention that the key to understanding the current bureaucratic problems of performance and accountability is the relative political autonomy of the civil service system and the unusual protection that it provides federal employees. Federal civilian white-collar employees are hired on the basis of merit, largely outside the political process. By law, they are not to be explicitly

involved in politics. Once beyond a probationary period, federal employees are granted tenure, and it is extremely costly to dismiss them (see Johnson and Libecap 1989a, 1989b). They are promoted within the framework of civil service rules that heavily weigh seniority over merit, and they are paid under a national pay plan that compensates them more than their private-sector counterparts are (see Smith 1977). There is also considerable wage compression within the federal salary structure, making it difficult to create a "rank-order tournament" for federal employees in promotion to encourage labor productivity (see Lazear and Rosen 1981). Further, their salaries are protected from fluctuating political conditions that lead to the growth or decline of their agencies (see Johnson and Libecap 1989a). Given this structure of bureaucratic rules, it is not surprising that there are debates over productivity, shirking, and the extent of discretionary behavior by federal employees.

In adopting merit hiring in the place of patronage, the president and the Congress were responding to the immediate demands of voters. But the very process of institutional change established the prerequisites for subsequent modifications in the civil service system. That is, one phase of institutional change created an environment that either required or facilitated further institutional adjustment. Hence, the process of institutional change in the civil service was one of incremental alteration, in a manner similar to that described in a general context by Douglass North (1990, 89).<sup>11</sup>

According to North, external events and the actions taken by various actors alter the relative costs and benefits of particular institutions and set in motion the forces of change. But institutional change is most often incremental because those interest groups negatively affected resist and because to change the "rules of the game" fully requires changing the culture, customs, and beliefs of members of the society.<sup>12</sup> Information is costly, and, hence, current beliefs about an institution are based on limited information that, factually, may be right or wrong. North conjectures that changing these beliefs is costly and that this condition slows down the process of institutional change.<sup>13</sup>

Given this approach to institutional change, four forces can be identified as underlying the sequential modification of the civil service system. (1) Changes in the political and economic environment facing the president and members of Congress have affected their relative support for patronage. (2) Once established, adjustments in the new civil service system, taken at one point in time, affected the relative positions of the president and the Congress regarding access to and control of the bureaucracy. Because the president and the Congress competed for authority over federal employees, both sought further modification in civil service rules to maintain or to advance their own positions. (3) The actions taken by the president and the Congress often assisted the efforts of federal unions, as a critical third party, in obtaining subsequent additions to the civil service system. The inauguration of the merit system raised the relative returns for federal employees of organizing to lobby for additional bureaucratic rules designed with their interests in mind. Once established, federal unions

engaged in lobbying and other political activities that contributed in an important way to the gradual development of the civil service system. (4) Instrumental in promoting the cause of federal workers has been the widespread belief that patronage is evil and that federal workers should therefore be spared from political influence. This conviction remains a powerful factor to this day, and it presents an obstacle to meaningful reform, which is often presented by opponents as weakening civil service protections and reexposing government employees to patronage pressures.<sup>14</sup> The contribution of the federal bureaucracy as an influential interest group in creating and protecting the civil service system is almost totally neglected in the literature; it therefore receives special attention in this volume.

In pursuing the topic of institutional change in the federal bureaucracy, we employ a number of paradigms. We will, for example, borrow heavily from the public choice literature.<sup>15</sup> In that literature, politicians are accorded the same behavioral status as any other individual in society; that is, they seek to maximize their own self-interest, most often by seeking election and reelection. Furthermore, well-organized interest groups are recognized as having an advantage in a representative democracy. These groups focus on narrow issues and tie their votes, money, and support of politicians to those issues. The interaction between politicians and interest groups in the design of the civil service system is a central focus of our analysis. In examining the opportunities for major change in the civil service system, we consider the division of power in the federal government and borrow from a recent literature on “structured induced equilibrium” that focuses on the rules for government decision making (see Shepsle 1979; Shepsle and Weingast 1984; and Weingast and Marshall 1988). The drafters of the Constitution designed a structure that assured that policy would not be overly responsive to the preferences of any one branch of government. This federal structure, however, strictly limits the ability of the president or the Congress to make unilateral changes in the civil service system at any point in time. Third, we rely heavily on the basic property rights paradigm and its implications for the costs borne by politicians in competing for control of the bureaucracy. Finally, we turn to the industrial organization literature to derive hypotheses about the management of the federal labor force and to explain the outcomes of different organizational arrangements.

At the outset, we want to emphasize that this book is not intended to be another exposé of the performance of federal bureaucrats. Nor do we offer a plan for reforming the existing federal bureaucracy. Indeed, as we discuss in chapter 8, there is a sense in which, despite all the complaints, the current institutional arrangement may in fact be relatively “efficient,” given the structural constraints of the federal system and the costs of major institutional change.

At this stage, we also wish to emphasize some additional points regarding the federal bureaucracy in order to better understand the debates about the problems associated with it and the modifications that have been made in the

civil service system over the past hundred years. Distinctions must be made among political appointees, who hold the top positions in most agencies; senior career officials, who hold positions in the Senior Executive Service (SES) or have top management General Schedule positions (GM- and GS-14 and -15) within the civil service; and the rank-and-file career workforce, who hold positions from GS-1 through GS-13. These three groups have very different incentives for policy administration and operate under different constraints within the bureaucracy. Senior political appointees are designated by the president, with the approval of the Senate. They are expected to help set and to carry out the administration's policy agenda within the bureaucracy. As such, their goals are political—to advance the objectives and interests of the president. Their positions within the bureaucracy are temporary, lasting at most the length of a presidential administration. They lack tenure protection and can be removed at the president's discretion. Senior career officials, who hold leadership positions within agencies, may have a role in the formulation of agency policy; they can also affect policy administration through long-standing ties to congressional committees, contacts with professional groups and other constituents, and management directives to subordinates. Unlike political appointees, they owe no specific allegiance to the administration. Rank-and-file career employees generally do not establish policy, but they are charged with administering it. They perform the routine operations within agencies, have day-to-day contact with constituents, and are often in a position to determine the details of policy application. They have strict tenure guarantees, have no expressed ties to the administration or to Congress, and by law are to be politically neutral. In fact, under the current bureaucratic structure, both groups of career civil servants have, to varying degrees, been placed essentially outside direct presidential or congressional control.

The implications of a well-protected, career bureaucracy for the performance and accountability of government have not been emphasized in the recent literature, which often views the bureaucracy as a single unitary entity.<sup>16</sup> The tendency is to focus on senior officials and their ability to carry out, or their propensity to stray from, the wishes of the president or the Congress. We point out that rank-and-file employees, who are the most shielded from political control by the civil service system, can also contribute to "policy drift." Not only does the bureaucracy matter, but the motives and restrictions provided by the civil service system also vary across the three groups involved. Hence, any analysis of the bureaucracy requires an understanding of the institutional environment, its ramifications, and how it came to be.

In chapters 2 and 3, we describe how the federal civil service system was inaugurated and expanded by the president and the Congress in response to increasing problems of administering a growing patronage labor force. In this discussion, we borrow from the theory of the firm, which addresses the problems of organizational size and the loss of control in explaining the movement away from patronage (see Williamson 1967; Williamson 1975, 117–26). In par-

ticular, as the patronage labor force grew after the Civil War, it became more and more costly for federal politicians to monitor the actions of their patronage appointees in order to ensure that the demands of constituents were met. The partitioning of the federal civilian labor force into patronage and merit components allowed the president and the Congress to address those demands while still maintaining patronage where it remained politically valuable. Our analysis suggests that, with the most at stake in improving the overall efficiency of government, the president would be the leader in the adoption and expansion of the merit system.

These changes in the administration of the federal labor force in response to growing organization size, however, created new problems that required further institutional adaptation. In order to constrain political opportunism regarding the use of merit employees, limited job-tenure guarantees and requirements for political neutrality were added by the president and the Congress to the initial civil service rules. A major hypothesis offered in this volume is that these rule changes, followed by the gradual replacement of patronage workers with merit system employees, set the stage for the rise of a new and influential interest group.

In chapters 4–6, we point out that these institutional modifications served to promote the rise of federal workers as an organized, independent interest group with very particular objectives in structuring the bureaucracy. The goals of federal unions, as a special interest, were often not consistent with the objectives of federal politicians, particularly the president. Conflicts over various aspects of the civil service system ensued, but federal unions were able to use the ongoing rivalry between the president and the Congress over control of the bureaucracy to secure favorable legislation and executive orders for their members.

In structuring the bureaucracy, the president and the Congress had an incentive to insulate senior-level officials from political manipulation in the administration of policy. Achieving this goal required shielding them from arbitrary dismissals and limiting the role of political favoritism in promotion and advancement. Federal unions, on the other hand, were concerned about obtaining similar protections and benefits for their membership, which was drawn largely from the rank and file. Because lower-level employees were more removed from policy determination and thereby less likely objects of manipulation, providing them with the same protections and benefits granted to senior career officials was less in the interest of the president or the Congress. Indeed, as these provisions were added to the civil service system, it became increasingly difficult for federal politicians to motivate or to manage the bureaucracy. As tenure provisions were strengthened and bureaucratic rules extended, the ability of politicians to dismiss employees was reduced, weakening their control over the bureaucracy. In chapter 6, we offer a number of reasons for the relative success of federal workers in obtaining higher compensation and job protection in comparison to both private- and public-sector counterparts.

In chapter 7, we examine a number of implications of a highly protected bureaucratic labor force for the performance of government. We suggest that civil service protections for career federal employees both allow and reduce the motivation for opportunistic bureaucratic behavior. On the one hand, since salaries and promotion opportunities for rank-and-file employees are insulated from the effects of agency growth or decline, those employees have less incentive to push for the expansion of agency mandates and budgets in order to advance. These findings bear directly on the frequently stated hypothesis that bureaucrats have a strong incentive to promote the growth of their agency in order to increase their salaries.<sup>17</sup> On the other hand, under the civil service system, the president and the Congress have fewer means of disciplining and controlling the rank-and-file labor force. For particular agencies, mandates can be restricted, budgets cut, discretion curtailed; but, absent fundamental changes in civil service rules, job tenure remains, restrictions on supervisory authority continue, and salaries and promotion proceed along previously established timetables.

The major finding of the volume is that the president and the Congress are unlikely to make sweeping changes in the civil service system. Both, of course, would like to enhance their own control over the bureaucracy. But placing senior career officials more or less off limits to political manipulation in the administration of policy provides significant benefits to federal politicians because it lessens the temptation to act opportunistically. The net benefits to federal politicians of these protections as they apply to lower-level career employees, however, seem to be negative. There are fewer gains from shielding these individuals from political competition and manipulation because they play a more peripheral role in policy formation and execution. In contrast to the rules governing senior-level personnel, the civil service rules that protect these individuals are due largely to the actions of federal unions. But the President and members of the Congress are rationally reluctant to take on this powerful interest group.

Finally, the book argues that a full account of why we should not expect a sweeping change in the civil service system requires an understanding of how the history of federal patronage has been perceived. Patronage in any form has come to be viewed as undesirable. As we discuss in the final chapter, current civil service reformers, academic experts, and, recently, the Supreme Court are convinced that all career government workers must be protected from political pressure. The often-repeated claim is that any adjustment in civil service rules to address issues of accountability and productivity potentially could lead to the unraveling of the system of protections that have been put into place and to a return to the spoils system. Although we believe that this concern is exaggerated, because the president and the Congress have had a vital interest in limiting patronage through the adoption and maintenance of the merit system, the specter of the spoils remains as a powerful break on reform efforts, one that federal unions and their supporters have been able to exploit.

Since 1883, piecemeal adjustments in the civil service system have been made in response to the objectives of the president and the Congress, as they competed for control of the bureaucracy, and in response to the demands of federal employee unions. Through this process, attributes have been incorporated into the civil service rules that have had long-term consequences for the governance and performance of the federal bureaucracy. As this book makes clear, the bureaucratic structure put into place at the behest of these three parties has created the “problem of bureaucracy,” and changes in this system will occur at best incrementally.

## Notes

1. See, e.g., Sayre (1965), Hecló (1977), Mosher (1979, 1982), Kaufman (1981), Seidman and Gilmour (1986), Knott and Miller (1987), Wilson (1989), and Osborne and Gaebler (1992). These discussions cover nearly thirty years, and it is striking how little the problems have changed. More recent discussions include U.S. House of Representatives (1993) and DiIulio, Garvey, and Kettl (1993). The report of the U.S. House of Representatives’ Committee on Government Operations states, “In general, we found that public perceptions—those that waste and abuse are rampant throughout the Federal Government—to be generally accurate. It pervades every agency and hundreds of important programs (1993, v–vii). The committee had examined nineteen departments and agencies. Similarly, DiIulio, Garvey, and Kettl (1993, 62–65) claim that federal programs and bureaucrats have a reputation for cumbersome or unresponsive administration, excessive complexity, and rudeness. In this book, we do not attempt a broad comparison of the performance of the federal government relative to corporations, private nonprofit organizations, or state and local governments. Our concern is with how the institutional structure of the civil service system came to be and its implications for the performance and accountability of the federal bureaucracy. We examine aspects of the efficiency of the civil service system in chap. 8.

2. The Clinton administration’s plan for reforming the federal bureaucracy, submitted to the president by Vice President Al Gore, hopes to remove “useless bureaucracy and waste” and free workers “from red tape and senseless rules” (see Gore 1993).

3. The volume edited by Sayre (1965) offers a number of articles pointing to the political autonomy of the federal bureaucracy and the associated reduced ability of politicians to make the bureaucracy accountable (in particular, see Kaufman 1965). Kaufman (1981) examines the independence of bureau heads and their ties with professional groups. Another examination of this theme as well as a detailed discussion of the protection provided by bureaucratic rules is provided in Hecló (1977). More recently, Mosher (1982), Knott and Miller (1987), Rosen (1989), and DiIulio, Garvey, and Kettl (1993) outline some reforms that would improve bureaucratic accountability.

4. For a discussion of the Keep Committee and the Commission on Economy and Efficiency, see Van Riper (1958, 191–92, 219–22) and U.S. House of Representatives (1912d). The Hoover Commission’s report is provided in Hoover Commission (1949). The President’s Private Sector Survey on Cost Control (Grace Commission 1984, 343) and DiIulio, Garvey, and Kettl (1993, 8) summarize past efforts to reorganize the federal government. Gore (1993) outlines the Clinton administration’s recommendations.

5. The pressures on almost every president to create these reform commissions arose out of broad concerns about the effectiveness and costs of government institutions, rather than solely as a result of complaints by specific constituents that an agency was not providing the desired services. As an indication of just how broad the scope of these investigations has been, the President's Private Sector Survey on Cost Control submitted thirty-six major task force reports and eleven studies of specific items, which the commission argued would bring a three-year savings of \$424.4 billion (Grace Commission 1984). Similarly, after examining every cabinet department and ten federal agencies, the National Performance Review recommended reforms that would bring a five-year savings of \$108 billion (Gore 1993, iii).

6. The lack of progress has been recognized. The Hoover Commission (1949, v) points to the "scant success" of previous reorganization efforts.

7. See Niskanen (1971), Tullock (1965), and Downs (1967). For discussion of the Niskanen budget-maximization hypothesis, twenty years after it was first proposed, see Blais and Dion (1991). For empirical examination of an aspect of the Niskanen hypothesis, see Johnson and Libecap (1989a).

8. That politicians have been instrumental in the design of the bureaucratic system has been noted by Horn (1988), Moe (1991), and Knott and Miller (1987).

9. For a summary of a broader literature on institutional change and the role of institutions in economic and political decision making, see Furubotn and Richter (1991). Specific work includes that by Davis and North (1971), Williamson (1975, 1985), North (1981, 1990), Eggertsson (1990), Ostrom (1986, 1990), and Libecap (1989a).

10. James Wilson has noted, "No politician ever lost votes by denouncing the bureaucracy" (1989, 235). Yet little is actually ever done to bring major reforms to the system.

11. One institution's legacies to subsequent institutional change often create a sense of path dependence. For discussion, see North (1990) and David (1985).

12. For North, institutions are "the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction" (1990, 3). They include a variety of arrangements, ranging from informal customs and traditions to formal constitutions, laws, court rulings, and administrative proceedings.

13. A related concept is that of bounded rationality, as discussed by Williamson (1975, 254-55). Some of the implications of imperfect information and bounded rationality for civil service reform are mentioned, but not developed, by DiIulio, Garvey, and Kettl (1993, 2-6).

14. We illustrate this issue in chap. 8.

15. For a survey of this literature, see Mueller (1989).

16. The literature is surveyed in chap. 7. The major contributors to the recent literature on bureaucracy include Tullock (1965), Niskanen (1971), Borcharding (1977), Weingast and Moran (1983), McCubbins, Noll, and Weingast (1987, 1989), Moe (1989), and Knott and Miller (1987). The civil service is given more explicit attention by Kaufman (1965), Heclo (1977), Mosher (1982), and Wilson (1989). Bureaucrats are essentially ignored by others concerned with policy formation and administration, such as Peltzman (1976) and Becker (1983).

17. The implications of these protections are discussed in chap. 7. Our analysis suggests that there is little incentive for federal employees to push for the growth of their agency as a means of advancement to higher levels of authority and pay. The role of agency growth and salaries is stressed in Downs (1967, 11), Niskanen (1971, 38-41), Tullock (1974, 127), and Heclo (1977, 131). For discussion of the budget-maximization hypothesis, see Blais and Dion (1991). The effect of agency growth or decline on salaries and the returns to tenure for federal employees are also discussed in Johnson and Libecap (1989a, 1989b).