Ministries and Agencies

The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic mechanism compares with other organizations exactly as does the machine with the non-mechanical modes of production.

—Max Weber

We [state officials] are humble subordinates who can scarcely find our way through a legal document and have nothing to do with your case except to stand guard over you for ten hours a day and draw our pay for it.

—The Trial by Franz Kafka

The power of state bureaucracy awes us when we peer over the sheer wall of an enormous dam or look up at a battleship bristling with sailors. As the preceding quotation indicates, the German sociologist Max Weber believed that modern state administration embodies instrumental rationality, defined as the pursuit of explicit ends through efficient means. Governments, however, also construct unneeded dams to enrich cement manufacturers and dispatch battleships to perform tasks requiring a rowboat. Focusing on these facts, another famous writer in German, Franz Kafka, described state bureaucracy as a labyrinth where condemned citizens wander without hope of escape. Kafka apparently believed that government bureaucracy embodies irrationality, defined as the pursuit of contradictory ends by inefficient means.

A democratic state should try to organize its bureaucracies to pursue explicit ends by efficient means, as envisioned by Weber. Motivating and controlling bureaucracy raises fundamental questions of law, which must be solved to avoid the irrationality envisioned by Kafka. This chapter develops a framework to analyze the interplay of politics and administration. I will analyze political

1 Weber 1974, p. 214. Weber described how a perfect bureaucracy operates: "Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs—these are raised to the optimum point in the strictly bureaucratic administration . . . . Bureaucratization offers above all the optimum possibility for carrying through the principle of specializing administrative functions according to purely objective considerations."

and judicial oversight of administrators. Here are some examples of questions addressed in this chapter:

Example 1: Assume the constitution separates the executive and the legislature. Do administrators in the state bureaucracy have more discretionary power when they are subject to review by the executive, the legislature, or both?

Example 2: A court or similar outside body imposes a tedious process on state administrators who wish to engage in environmentally sensitive activities. Administrators respond by reducing these activities. Will ministries or agencies with broad powers reduce these activities more or less than ministries or agencies with narrow powers?

Example 3: The constitution of a certain country empowers the president to appoint the supervisor of banks with confirmation by the legislature. Before the appointee’s five-year term of office expires, the president wants to remove the supervisor of banks. The courts must decide whether the constitution allows the president to remove the supervisor of banks unilaterally, or whether removal requires the consent of the legislature. How will the court’s decision affect the discretionary power of the supervisor of banks?

Example 4: The ministry of aviation, which regulates airline schedules, is financed from general tax revenues. If financing from a tax on aviation fuel replaces financing from general tax revenues, how will the ministry’s behavior change?

General Features of State Administration

The legislature, judiciary, and executive make decisions whose implementation in a modern state depends on an array of ministries, departments, and agencies. Each of these organizations has its own history and character. To illustrate using the United States, the Department of State is old and the Environmental Protection Agency is new, the Department of Defense is large and the Federal Reserve Board is small, the Comptroller of the Currency deals with banks and the Occupational Health and Safety Administration deals with employers. In addition to differences, however, all of these organizations share some common characteristics by virtue of being government bureaucracies. I will mention four common characteristics that form the basis for the models in this chapter.

First, politicians fund, oversee, and appoint the leadership of most government bureaucracies. For example, the U.S. president appoints and removes the secretary of agriculture, and the Department of Agriculture receives most of its funds from appropriations by Congress. Politicians can usually influence a ministry or state agency by appointing or removing its leaders, adjusting its budget, reviewing its performance, and imposing rules upon its behavior. Political control at the top forces bureaucracies to respond to politics. In exceptional cases,
however, the law insulates a state organization from political influence. To illustrate, the U.S. central bank (Federal Reserve Bank) finances itself from profits, not congressional appropriations, and the president appoints the members of its governing board to fourteen-year terms of office. Organizations like the central bank are exceptions proving the rule that elected officials directly control most ministries or state agencies in a democracy.

Second, in state administration, an official’s income and power increase with the size of the administrative unit under his control. Promotions come quickly to administrators when their organization grows, and promotions come slowly to administrators when their organization shrinks. Thus, administrators typically value size and growth of their organization. Given discretionary power, civil servants press to expand administration. An amusing example from the 1920s charts the steady increase in employees of the British admiralty simultaneously with the steady decrease in British naval ships.

Third, hierarchical organizations adopt rules for making decisions. As modeled in chapter 4, rules reduce the ability of lower-level officials to divert resources from the purposes imposed by higher-level officials. Without rules, the bureaucracy spins out of control and diverts public resources for its own benefit. However, rules also reduce the flexibility of officials in responding to change. With excessive rules, the inflexibility of state administrators stifles the citizens.

Fourth, many government organizations regulate the private economy, which responds by influencing the regulators. Regulator and regulatee relate to each other intimately and strategically. The regulatees’ interest in the behavior of the regulator is focused, whereas the general public’s interest is diffuse. Consequently, the regulatees usually enjoy disproportionate influence with the regulator. In the extreme case, the regulatees capture the regulator and use the state to extract monopoly profits or subsidies (Elhauge 1991; Stigler 1975).

The common characteristics of state administration are political control from above, pressures to expand from within, pressures from organized interests outside, and the need to follow rules. These common characteristics suggest the possibility of a general theory of state administration, as opposed to particular theories based on the unique history of each organization. In chapter 4, the delegation game and the rule game analyzed how each link in the chain of authority dilutes purposes imposed from the top. In this chapter, I build on dilution effects to predict the response of state bureaucracies to law.

ADMINISTRATION AS BUREAUCRACY

State agencies typically use tax revenues to supply a service or produce public goods. To depict these facts, the horizontal axis in figure 7-1 indicates the size

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3 See the chart titled “Admiralty Statistics” on p. 8 of Parkinson 1957. The capital ships in commission declined from 62 in 1914 to 20 in 1928, while dockyard officials and clerks increased by 40 percent and admiralty officials increased by 78. One version of “Parkinson’s Law” asserts that the size of a bureaucracy varies inversely with amount of work that it has to do.
of the ministry or agency as measured by budget or staff. As the organization grows, it supplies more public goods at higher total costs. The vertical axis indicates the benefits to society, or net social benefits, which equal the value of the public goods minus the cost of supplying them. Starting from the origin in figure 7-1, net social benefits increase as the ministry or agency expands. Net social benefits reach their maximum when the agency’s size equals $x^*$, which is the agency’s most efficient size. Beyond $x^*$, further expansion of the organization costs more than the value of the additional public goods, so net social benefits decrease as the organization’s size increases.

Many informed citizens will presumably prefer the ministry or agency’s size to equal $x^*$, which maximizes net social benefits. If administrators, interest groups, and politicians pursued the public interest as defined by the efficient allocation of resources, they would also aim for a ministry or agency of size $x^*$. In fact, each group has its own distinct interests, which I will sketch.

As a state organization expands, administrators in it gain more responsibilities and more pay. Administrators thus typically favor expansion beyond the size required for allocative efficiency. The engorgement principle is the hypothesis that administrators in a ministry or agency strive to maximize its size as measured by budget and staff (Niskanen 1971). In terms of figure 7-1, state administrators want to go as far to the right on the horizontal axis as possible, say to point $x_4$.\footnote{I implicitly assume that constraints bind as the agency expands, so that $x_4$ is a finite number.}

While administrators seek to expand each state bureaucracy, interest groups may pursue other ends. For example, many ministries or agencies provide valuable services to industries and also impose burdensome regulations. A regulated industry prefers a state regulator whose size maximizes the industry’s profits. As
the state bureaucracy grows in size, valuable services and burdensome regulations increase at different rates. The rate at which each increases determines the size of the state bureaucracy that maximizes the industry’s profits. Figure 7-1 depicts a typical result in which the regulatee prefers a smaller regulator, say the point \( x_r \), rather than the social optimum \( x^* \).

Figure 7-1 depicts the interests of regulators and administrators, as well as the social optimum. As depicted, the administrators prefer a large organization \( x_a \) and the regulatees prefer a small organization \( x_r \). Whereas regulatees and administrators have a concentrated interest in a particular ministry or agency, most citizens have a diffuse interest. Consequently, regulatees and administrators typically organize better than citizens. Better organization results in better information and more influence. Since many citizens remain unorganized and rationally ignorant, the persuasive power of regulatees and administrators disproportionately influences electoral competition. Sometimes results follow the median rule, which can yield the cost-benefit optimum as explained in chapter 2, and sometimes regulatees or administrators alter the outcome. If electoral competition favors the regulatees over the administrators in figure 7-1, then the winning politicians will prefer a small ministry or agency. Conversely, if electoral competition favors the administrators over the regulatee, then the winning politicians will prefer a large agency.

As explained, the point \( x_r \) in figure 7-1 depicts regulatees who want to shrink their regulator. In many situations, however, the regulatees capture the regulator and use the state to extract monopoly profits or subsidies (Elhauge 1991; Stigler 1975). To illustrate, many airlines apparently prefer for the state aviation agency to choke entry and enforce high fares. Similarly, many farmers prefer large agricultural subsidies and many retirees prefer large social security benefits. In these circumstances, the regulatees and other beneficiaries may favor a large agency, as indicated by \( x^*_r \) in figure 7-1. Under these conditions, the combined influence of regulatees and regulators creates strong pressure for a large state bureaucracy.

According to this sketch of a behavioral theory of ministries or agencies, the interests of the administrators and regulatees typically conflict with the interests of the general public. In the next section I will explain how agencies react when politicians and judges try to control them.

**Question:** Assume that politicians determine the size of state agencies, and assume that politicians respond more to state administrators and regulatees than to the general public. Describe the configuration of interests of these groups that will result in a larger state agency than required for allocative efficiency. Next, describe the configuration of interests that will result in a smaller state agency than efficiency requires.

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5 Assuming effective electoral competition, indifference curves for politicians in figure 7-1 would be isouquants for votes.
**Chapter Seven**

**Discretionary Power**

**Fig. 7-2 Ministry or Agency Power and Transaction Costs**

**Monitoring Ministries and Agencies**

The constitution and other fundamental laws allocate the powers to oversee the state bureaucracy. To illustrate, in a typical presidential system, the executive can issue orders to civil servants, the legislature can hold hearings and adjust appropriations of ministries or agencies, and the courts can adjudicate complaints against administrators. I will analyze how the separation of powers affects discretionary power in administration. My analysis introduces a spatial model of discretionary power that reappears in chapter 9.6

**Unilateral Oversight**

I begin by formalizing the idea that a civil servant’s discretionary power ends where an act triggers effective oversight. The policy choices of a civil servant typically trigger oversight by departing too far from the preferences of a politician or judge. Figure 7-2 depicts a single dimension of choice for public policy. The dimension of choice could be any policy represented by a variable, such as expenditure on a particular program or the ideological location of a policy from right to left.

I assume that an administrator directly controls the variable in figure 7-2, and a politician or judge has the power to oversee the administrator. Consequently, I call the administrator the “agent” and the overseer the “principal.” Point A represents the agent’s most preferred value for the variable. If unconstrained, the agent would choose point A. The preferences of the principal, however, constrain the agent. Point P represents the most preferred value of the principal. The principal’s dissatisfaction with the agent’s policy increases with the distance between P and the agent’s choice. I assume that by exercising oversight, the principal can force the agent to choose point P. Exercising oversight, however, imposes transaction costs t upon the principal. Consequently, the principal will not exercise oversight unless the resulting reduction in dissatisfaction exceeds the transaction costs t.

To characterize this behavior mathematically, let \( P_i \) indicate the point where the principal’s dissatisfaction with the agent equals the transaction costs of oversight. \( P_{low} \) denotes the lower value of \( P_i \), and \( P_{high} \) indicates the upper value of \( P_i \). Any choice of a point inside the set \([P_{low}, P_{high}]\) will not trigger oversight. Conversely, any choice of a point outside the set \([P_{low}, P_{high}]\) will trigger oversight.

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6 For a recent contribution to the spatial model of agency discretion, see Spitzer 1990.
The agent's discretionary power in figure 7-2 equals the set of points that do not trigger oversight: \([P_{\text{low}}, P_{\text{high}}]\). A rational agent will choose the point closest to his most preferred point, subject to the constraint of not triggering oversight. To illustrate, a rational agent will choose point \(P_{\text{low}}\), which is the closest value to \(A\) inside \([P_{\text{low}}, P_{\text{high}}]\).

Requiring the agent to follow rules and not make individualized decisions often lowers the transaction cost of oversight by the principal. As depicted in figure 7-2, lowering the transaction costs of oversight reduces the agent's discretionary power by decreasing the distance between \(P_{\text{high}}\) and \(P_{\text{low}}\). (Recall the rule game in chapter 4 where imposing rules reduces the agent's discretionary power.) Rules pervade bureaucracies in order to lower monitoring costs and reduce the diversion of resources. To illustrate, the Swiss usually apply a formula for dividing federal resources among the nation's three major language groups. Federal administrators who depart from this conventional rule risk scrutiny and reprimand.\(^7\) The formula lowers the transaction cost of monitoring administrators by narrowing the class of cases receiving scrutiny.

When rules give rights to individuals, the agent who breaks the rules causes the victim to appeal for redress. By appealing for redress, victims alert the principal to the fact that the agent has broken the rules. So principals promulgate rules in order to obtain the information needed to control agents. Monitoring by responding to complaints has been described as "putting out fires."

To illustrate, assume that an administrator must follow a prescribed process for deciding whether to grant or deny a permit. If the administrator violates the process and denies a permit to someone, the victim may appeal to a court or administrative tribunal. In conducting its inquiry, the court or administrative tribunal will inform the administrator's superior about the allegations against the administrator. Conversely, if, instead of a rule, an administrator has discretion to vary the process when deciding on an application for a permit, then the applicant who is denied a permit may have no grounds for appeal. Without an appeal, the court or administrative tribunal will not alert the administrator's superior about the administrator's behavior.

High political officials, such as legislators and ministers, require feedback from constituents concerning the performance of administrators.\(^8\) Discovering better means to alert political officials about the actions of administrators lowers the transaction costs of oversight and reduces the discretionary power of the state bureaucracy.

### Administrative Procedures Act

According to figure 7-2, reducing the transaction costs of oversight increases control over administrators. To reduce the transaction costs of oversight, many

\(^{7}\)The conventional formula gives 10/15 of resources to German speakers, 3/15 to French speakers, and 2/15 to Italian speakers.

\(^{8}\) "Our results indicate that lobbying can help reduce information asymmetries between Congress and the bureaucracy, and that the mere threat of sounding a 'fire alarm' can result in policy concessions for interest groups" (Epstein and O'Halloran 1995).
nations have laws imposing uniform procedures on administrators. The prescribed procedures often differ depending on the issue to be decided. One kind of procedure is used to decide individual rights, as when issuing or denying a building permit. Another kind of procedure is used to promulgate regulations for a class of people, as when making a safety standard for constructing buildings. The law often holds administrators to a higher standard of legality when deciding individual rights than when making regulations. As a result, an administrative procedure to decide individual rights often resembles a court proceeding, whereas making a regulation often resembles legislation.

To illustrate, every U.S. agency must follow the decision-making procedures prescribed in the Administrative Procedures Act, except when specific legislation stipulates alternate procedures. Courts have interpreted this law to require quasi-judicial procedures ("formal procedures") for deciding individual rights and quasi-legislative procedures ("informal procedures") for making regulations. Quasi-judicial procedures involve a hearing, the right to give evidence, and a decision based on the record of the proceedings. For example, if a firm applies for a permit, the administrators typically must have a hearing to decide whether to grant the permit and must decide based on the record of the hearing. If administrators refuse the application for a permit and the applicant appeals, a review of the process will consider whether the record of the hearing justifies the administrator's decision.

In contrast, quasi-legislative decisions must follow a less burdensome procedure involving a proposal by the administrators, publishing the proposal, inviting comments, considering the comments, and announcing the decision. After following the prescribed procedures to obtain information, the administrators can use their own discretion in making a decision. Promulgating a new regulatory standard does not require a hearing and a decision on the record of the hearing. If someone challenges the legality of the new regulatory standard, the tribunal will not demand that the administrators produce a written record of the information forming the basis of the decision.

U.S. federal courts decide whether to classify decisions by agencies as quasi-judicial or quasi-legislative under the Administrative Procedures Act. Classifying a decision as quasi-judicial creates strong rights in individuals to appeal an agency's decision to the courts. Conversely, classifying a decision as quasi-legislative gives more discretionary power to the agency.

To illustrate from an actual case, assume that the nuclear agency grants an operating permit to a particular power plant without considering the environmental consequences of reprocessing spent nuclear fuel from this plant. The nuclear agency decrees that the environmental impact of reprocessing spent nuclear fuel is a general problem of all nuclear power plants. Consequently, an application to operate a particular nuclear power plant need not address the issue of reprocessing spent nuclear fuel from this particular plant.

9 A comparison between uniform administration in the United States and more diverse procedures in Germany is in Rose-Ackerman 1994.

When an environmental organization sues the nuclear agency for violating the Administrative Procedures Act, the court could deem the decision to omit spent fuel from the environmental impact statement as quasi-judicial or quasi-legislative. If courts deem the decision quasi-judicial, the nuclear agency must follow a relatively burdensome procedure each time it issues an operating permit. The quasi-judicial procedure includes the right of the environmental organization to present testimony at a hearing and the obligation of the agency to reach a decision based on the record of the hearing. Affected parties who disagree with the agency’s decision in a particular case can easily find a legal issue over which to sue. Alternatively, if courts deem the decision quasi-legislative, the nuclear agency can follow a less burdensome procedure and create a regulation applicable to every case. Affected parties who disagree with the agency’s decision in a particular case cannot so easily find a justiciable issue.

To interpret this example using figure 7-2, identify the “principal” P with a powerful political figure who wants to control the nuclear agency, such as the president or the chairman of a congressional committee. If courts classify the nuclear agency’s decision as quasi-judicial, groups that disagree with the nuclear agency, such as aggrieved environmentalists, will tend to sue. The suit will alert the president or the committee chairman that the nuclear agency has run afoul of a political constituency. The president or the committee chairman may respond by pressuring the nuclear agency to change its behavior. Thus, feedback from the lawsuit lowers the transaction costs of oversight for the principal, which reduces the discretionary power of the agent.

If the preferences P of the president or committee chairman diverge from the preferences A of the nuclear agency, the principal will distrust the agent and thus welcome court monitoring of the agent. Conversely, if the preferences P of the president or committee chairman converge with the preferences A of the nuclear agency, the principal will trust the agent and thus want the court to give discretionary power to the agent. (Recall the delegation game in chapter 4, according to which delegating discretionary power to the agent saves scarce time for the principal.)

“Sovereign immunity” once referred to the doctrine that the English king could not be sued in his own court. American law absorbed this principle as an aspect of the separation of powers. To keep the executive and judiciary separate, it is said, no one can sue the government in its own court. If, however, administrators cannot be sued, then the executive is deprived of information about the behavior of administrators that court proceedings would disclose. Enforcing sovereign immunity eliminates a tool for disciplining administrators.

To illustrate this doctrine, exposure to radiation during atmospheric tests of atomic bombs between 1946 and 1963 caused disease or death to some American soldiers and civilians. Statutes and judicial decisions on sovereign immunity protect the U.S. government from resulting suits. However, civilian contractors who supplied equipment for the tests or helped conduct them were not shielded from legal liability until passage of the “Warner Amendment,” a rider

to a defense appropriation bill enacted in 1984. This statute allows the U.S. government to be substituted as a defendant for private contractors in suits arising out of atomic weapons testing. After substitution, the government asserts its sovereign immunity. Two federal circuit courts have upheld the Warner Amendment’s constitutionality and the Supreme Court refused to hear the appeals.\(^\text{12}\) Apparently the government and private contractors are sometimes shielded from the consequences of their negligent practices with regard to radiation.\(^\text{13}\)

The threat of liability deters everyone—individuals, businesses, and the state—from exposing people to danger. The doctrine of sovereign immunity thus deprives citizens of an essential mechanism for disciplining the state. Perhaps that is why U.S. courts have deeply eroded the doctrine of sovereign immunity in recent years by allowing more suits against the government.

Questions

1. Assume that transaction costs of oversight increase in figure 7-2. Describe the resulting change in \([P_{\text{low}}, P_{\text{high}}]\). Explain how the resulting change in behavior by administrators depends on whether A is inside or outside \([P_{\text{low}}, P_{\text{high}}]\).

2. Assume that the chief executive appoints the minister of housing, who directs the civil servants in the ministry of housing. Why might the chief executive and the minister of housing want citizens to have the right to appeal decisions by the ministry of housing to a tribunal?

Multiple Principals

Figure 7-2 depicts a single principal with powers of oversight. Sometimes, however, multiple principals have powers of oversight over a single event. This situation is called the common agency problem. To illustrate, when the constitution separates powers, more than one branch of government may have the power to oversee administrators in the state bureaucracy. The consequences for the agent differ depending on whether the principals exercise oversight unilaterally or cooperatively.

By \textit{unilateral} I mean that a principal can exercise the particular power of oversight on its own. For example, the executive and legislative may have unilateral power to investigate an agency’s behavior. By \textit{cooperative} I mean that one principal cannot exercise oversight without agreement by the other principal or principals. For example, effective discipline of administrators may require the legislature to hold hearings resulting in findings and the executive to respond to the findings by issuing orders to the administrators. Or the executive may remove an official from office and nominate a successor and the legislature may

\(^{12}\) Atmospheric Testing Litig., 820 F2d 982 (Ath Cir. 1987); \textit{Hammong v United States}, 786 F2d 8 (1st Cir. 1986).

\(^{13}\) Fletcher 1990.
have to confirm the nomination. Or the executive may issue a new order to the agency and the court may have to review the order’s legality.

I will extend figure 7-2 to represent unilateral and cooperative oversight, respectively. In figure 7-2, the principal will not review the agent unless the resulting reduction in the principal’s dissatisfaction exceeds the transaction cost of the review. Adding an additional principal with power of unilateral oversight increases the probability that a given behavior by the agency will trigger review by one of the principals. Figure 7-3 depicts these facts by adding a second principal to figure 7-2. \( P^* \) denotes the most preferred point of the second principal, and the set \([P_{low}^*, P_{high}^*]\) denotes the range of points that will not trigger review by the second principal. With power of unilateral review by two principals, the agent’s discretionary power in figure 7-3 equals the intersection of the set of points that will not trigger review by the first or second principal:

\[
\text{agent's discretionary power} = [P_{low}^*, P_{high}^*] \cap [P_{low}^*, P_{high}^*]
\]

\[
= [P_{low}^*, P_{high}^*].
\]

Rather than choosing \( P_{now} \) as in figure 7-2, the rational agent in figure 7-3 will choose \( P_{low}^* \). In general, adding another principal with unilateral oversight usually decreases, and cannot increase, the agent’s discretionary power.¹⁴

I have shown that adding a second principal with unilateral power of review decreases the agent’s discretion. Next I show that adding another principal with cooperative oversight increases the agent’s discretionary power. With cooperative oversight, each principal can veto oversight by another principal. To be specific, assume that reviewing and changing an administrative decision requires the cooperation of the executive and legislature. Figure 7-4 depicts the most preferred point of the executive, \( E \), and legislature \( L \), on a dimension in policy space. Starting from the left side of figure 7-4, the executive and the legislature prefer moving to the right. Once the point \( E \) is reached, however, the executive opposes and the legislature favors moving further to the right.

Similarly, starting from the right side, the executive and the legislature prefer moving to the left. Once the point \( L \) is reached, however, the legislature

¹⁴ In principle, the intersection \([P_{low}^*, P_{high}^*] \cap [P_{low}^*, P_{high}^*]\) could be empty, in which case the agent is paralyzed unless the principals cooperate and bargain to an agreement.
opposes and the executive favors moving further to the left. Thus the set of points between E and L, denoted [E,L], defines the Pareto set relative to the preferences of the executive and legislature.

If the agent chooses its policy from any point outside the Pareto set, the executive or the legislature both prefer some point inside the Pareto set. They are, consequently, prepared to cooperate in reviewing the agent and directing a change in its policy. Whether E and L actually review A depends on transaction costs. If transaction costs of review are zero, E and L will cooperate in conducting a review whenever the agent chooses a point outside of [E,L]. If transactions costs of review are positive, E and L will cooperate in conducting a review whenever the agent chooses a point far enough outside of [E,L] such that the benefit to the executive and legislature from a change exceeds their transaction costs from conducting the review.

Conversely, if the agent chooses its policy anywhere inside the Pareto set, the executive or the legislature will block any attempt to change the policy by not cooperating in conducting the review. This is true even when the transaction costs of review equal zero. Assuming review is costless, the set [E,L] defines the agent’s discretionary power. To illustrate by figure 7-4, the agent most prefers point A, and L is the closest point in the Pareto set to A, so the rational agent that faces costless review chooses point L. By choosing point L, the agent guarantees that the legislature will veto any attempt by the executive to review the agent. Assuming oversight is costless, the agent’s discretionary power equals the Pareto set for the principals who can veto oversight. In general, adding another principal to those who must cooperate in order to review the agent usually increases, and cannot decrease, the agent’s discretionary power.

Notice that in figure 7-2, where I assume unilateral oversight, the discretionary power of the agent shrinks and disappears as the cost of oversight by the principal falls toward zero. In other words, transaction costs of oversight create the discretionary power of administrators. The situation is different in figure 7-4, where I assume cooperative oversight. As the cost of oversight by the principals falls toward zero in figure 7-4, the discretionary power of the agent approaches the Pareto set for the principals. In other words, disagreement among principals creates the discretionary power of administrators.

Questions

1. Assume the executive appoints and removes ministers. Consequently, the executive can review the ministry. Assume that courts initially refuse to review
the legality of a certain class of actions by the ministry, and, subsequently, the courts change and assert this power. In other words, the courts initially defer to the executive and subsequently stop deferring. Do the new facts constitute “unilateral” or “cooperative” review as defined above? Predict how the change in the court’s behavior will affect the discretionary power of the minister.

2. The comptroller general of the United States, who runs the General Accounting Office, is appointed by the president. The courts determined that the president can remove the comptroller general without the consent of Congress. Adapt figure 7-4 to show how the comptroller general’s discretionary power would increase if removal required the consent of Congress.

3. The U.S. president appoints some administrators and nominates others whom the Senate must confirm. Predict how the difference between appointment and nomination by the executive changes the discretionary power of the president. Also predict how the difference affects the behavior of an agency’s directors.

**INFLUENCING STATE AGENCIES**

I will now consider some instruments that principals use to influence agencies. When the state supplies some kinds of public or private goods, many decisions must be made about individuals, such as determining coverage of a regulation or eligibility for a benefit. Such decisions can be made retail or wholesale. The retail procedure uses individualized decision making. The wholesale procedure promulgates a rule and applies it to everyone.

The two procedures differ with respect to transaction costs. The transaction costs of individualized decision making increase rapidly as the state supplies more of the good. In contrast, promulgating a general rule requires an initial expenditure, but once the rule is promulgated, the cost of applying it to additional decisions is relatively low.

Figure 7-5 depicts the difference in transaction costs between retail and wholesale decisions. The horizontal axis represents the quantity of the good supplied by a ministry or agency, and the vertical axis represents the ministry or agency’s total transaction costs of supplying the good. The transaction cost of individualized decision making increases rapidly as the supply of goods increases, as indicated by the steep line labeled “individualized decisions.” The wholesale procedure requires promulgating a general rule, which requires an initial expenditure indicated by c. Once the rule is promulgated, however, the cost of applying it to additional decisions is relatively low, as indicated by the modest slope of the line labeled “general rules.”

The intersection of the total cost curves, which occurs at \(z^*\), is a tipping point. Individualized decision making is cheaper when supplying less than \(z^*\) of the good, whereas promulgating a general rule is cheaper when supplying more than \(z^*\) of the good. Thus, general rules are more efficient than individualized
decisions for supplying large quantities of goods. For example, transaction costs \( T \) will produce \( z_i \) goods by general rules or \( z_i \) goods by individualized decision making.

To illustrate the contrast in procedures, consider two examples modeled on actual U.S. legal cases.\(^{15}\) Open land is scarce in urban areas, so new roads are sometimes built through parks. Decisions about locating new roads, which require comparing the value of transportation and parks, can be made retail or wholesale. Retail requires the transportation department to hold hearings and weigh all the factors that could influence the unique value of each parcel of parkland. Wholesale requires the transportation department to promulgate rules specifying the criteria to use when purchasing parkland for roads. Rules restrict the scope of issues for consideration. Once the transportation department promulgates rules, it must follow them instead of considering the unique value of each parcel of land.

Given these facts, the horizontal axis in figure 7-5 can be interpreted as miles of roads built through parks by the transportation department. When building few roads, the retail procedure that uses individualized decision making is cheaper. When building many roads, the wholesale procedure that uses rules saves transaction costs for the transportation department.

As a second example, consider the construction of nuclear power plants. Assume that the nuclear agency decides whether to license the operation of a nuclear power plant.\(^{16}\) For this example, interpret the horizontal axis in figure 7-5 as the number of nuclear power plants licensed for operation by the nuclear power agency.

\(^{15}\) This hypothetical is based on *Citizens to Preserve Overton Park, Inc. v Volpe*, 401 US 402, 91 SCt 814, 28 LEd2d, 136 (1971).

\(^{16}\) This hypothetical is suggested by *Vermont Yankee Nuclear Power Corp. v Natural Resources Defense Council*. 
agency. “Individualized decision making” means that before making a decision, the nuclear agency holds hearings or otherwise consults with the affected parties. At these hearings, the nuclear agency decides what to do in light of the particular features of each case. “General rules” means that the nuclear agency promulgates rules that specify the criterion to use in making these decisions, and then the nuclear agency restricts its deliberations to the criteria specified in the rules. When licensing few nuclear plants, the retail procedure that uses individualized decision making is cheaper. When licensing many nuclear plants, the wholesale procedure that uses rules saves transaction costs for the nuclear agency.

As a third example, I apply the retail-wholesale distinction to the decisions of courts. Recall the preceding discussion in which the court had to decide whether the licensing of nuclear power plants by the nuclear agency is “quasi-judicial” or “quasi-legislative.” If courts classify the nuclear agency’s decision as quasi-judicial, the court can decide these disputes case by case, which gives intensive control to the court. Conversely, if courts classify the nuclear agency’s decision as quasi-legislative, the court can decide a case about the general rules followed by the nuclear agency. To illustrate concretely, interpret the horizontal axis in figure 7-5 as the number of suits heard by the court, and interpret the vertical axis as the court’s costs in hearing suits. According to this interpretation of figure 7-5, if few nuclear plants must be licensed in the future, the court can decide case by case at low transaction costs. In these circumstances, the court obtains intensive control over the nuclear agency at low transaction costs. If, however, many nuclear plants must be licensed in the future, the court will pay high transaction costs for case-by-case adjudication. Instead, the court may prefer making a general rule, which sacrifices some of its control over the nuclear agency and lowers its transaction costs.

In general, if the court finds itself beyond \( z^* \) in figure 7-5, then it must trade off transaction costs and control over administrators. A rational court will make this trade-off by comparing its preferences and the preferences of administrators. If the court’s preferences diverge from the administrators’ preferences, the court will tend to favor the high level of control obtained through case-by-case decision making. Conversely, if the preferences of the court converge with the preferences of the administrators, the court will tend to favor saving transaction costs by making general rules.\(^\text{17}\)

**Questions**

1. The ministry of forests must decide which state forests to license for harvesting and which to preserve. So far the ministry of forests has made such decisions case by case. Discuss when the ministry of forests will change its procedures, abandon case-by-case decisions, and make a general rule.

2. In licensing nuclear power plants, assume the court must decide whether the nuclear agency must follow a quasi-judicial procedure or a quasi-legislative

\(^{17}\) I implicitly assume constant opportunity cost of the court’s time. As the opportunity cost of the court’s time increases, the court will tend to favor general rules over case-by-case decisions.
procedure with respect to the environmental impact of spent nuclear fuel. Also assume the executive who appoints the head of the nuclear agency is pro-nuclear power, whereas the court is anti-nuclear power. Describe how a rational court might make this decision.

HOW PROCEDURES AFFECT RESULTS

Politicians and courts often try to affect administrators by imposing procedures for making decisions. For example, the executive tries to reign in the environmental agency by imposing procedures for issuing logging permits, or a court tries to reduce police abuse by requiring policemen to record interrogations of prisoners. When will imposing burdensome procedures on administrators produce different results, instead of yielding the same results at higher cost?

To answer this question, I will apply the distinction between retail and wholesale decisions to agents. Assume that an agent produces \( z \) goods in figure 7-5 by applying a wholesale rule. The number of decisions made by the agency exceeds \( z' \), so the wholesale rule is cheaper than case-by-case decisions. Now assume that a principal, who might be a political official or a court, wants to reduce the agent's supply of this good. To do so, the principal requires the agent to switch from wholesale to retail decisions. The switch in procedure increases the agency's cost of supplying this public good.

Will the agent respond by decreasing its supply of this public good? For private firms, an increase in the cost of supply causes a reduction in the quantity supplied (supply curve shifts up). Applying price theory to the state reaches the same conclusion about ministries and agencies. If the democratic process works, politicians reward administrators for supplying goods, not wasting resources. An increase in the cost of supplying one good causes administrators to produce less of it and to produce more of another good.

The extent of the decrease usually depends on the administrators' ability to substitute another good in place of the one burdened by more costly procedures. When substitution is easy politically and technically, imposing a more costly procedure causes a large decrease in the supply of the good in question. To illustrate, if the agency is responsible for producing a large number of public goods that require similar technology, then the agency can easily shift resources from producing one good to another.

Conversely, when substitution is difficult politically or technically, imposing a more costly procedure causes a small decrease in the agency's supply of the public good in question. To illustrate, if the agency is responsible for producing a small number of public goods that require dissimilar technologies, then the agency has difficulty shifting resources from producing one good to another.

To illustrate concretely, contrast the effects of courts' imposing burdensome procedures on building roads through parks and licensing nuclear power plants. Requiring individualized hearings before building roads through parks will pre-
sumably cause the transportation department to build fewer roads through parks. Similarly, requiring the nuclear agency to conduct individualized hearings before licensing nuclear power plants will presumably cause the nuclear agency to license fewer nuclear plants. Although the effect goes in the same direction in both cases, its size presumably differs. The transportation department presumably builds a small fraction of its roads in parks so it can build roads elsewhere. Instead of resisting the court’s decision, the transportation department will probably avoid burdensome procedures by locating new roads away from parks.

The nuclear agency, however, is situated differently. Assume that the nuclear agency has no jurisdiction over coal or hydroelectric power. If courts impose burdensome procedures on building nuclear power plants, the nuclear agency cannot shift its activities to supplying another good. To sustain its employment and appropriations, the nuclear agency needs to build or license nuclear power plants. Consequently, administrators in the nuclear agency will resist decreases in nuclear power plants. Under this assumption, imposing higher transaction costs on licensing nuclear power plants will increase the cost of nuclear power without causing the nuclear agency to shift resources to supplying another good.

Politicians and courts often try to influence administrators by imposing procedures for making decisions. Administrators respond to external controls by adjusting their product mix in order to protect their organization’s employment and appropriations. Administrators accept external direction when doing so does not jeopardize the size of their organization, whereas administrators resist external directions that jeopardize future size and growth. In general, politicians and courts that impose burdensome procedures to change outcomes will have the most effect on administrators who can easily substitute against the burdened good. (The appendix to this chapter analyzes substitution effects more formally.)

These facts point to an advantage of large, broad, state bureaucracies. A large, broad organization produces many different products, so it can shift from producing one to another by an internal transfer of workers. Since substitution is relatively easy, it responds to external attempts to change its output. To illustrate, in Germany the administration for each state has broad responsibility to implement federal projects, so substitution is relatively easy between federal projects within the administration of a state. In contrast, a relatively small, narrow organization produces a few products, so shifting to another product may require laying off workers or transferring them to another organization. Since substitution is relatively difficult, a small, narrow organization resists external attempts to change its output. In the next section, however, I explain an offsetting advantage of a relatively narrow organization with few products.

**STRATEGIC POLICY**

The response of administrators to external controls depends in part on financing. General tax revenues typically finance ministries and state agencies, so these organizations have an incentive to lobby the legislature for higher appropriations.
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Alternative financing can improve the organization's incentives. A better incentive system automatically provides more revenues to an organization that produces public goods more efficiently. To illustrate, with user fees the state organization collects more revenues by supplying more of the public good for people to use. To be concrete, a public swimming pool that finances itself from an entry fee will enjoy more revenue by making the pool more attractive to more people.

The same result can be achieved by financing from a tax on a private good that complements the public good. To illustrate, if gasoline taxes go to road construction, then the transportation ministry gains more revenues by building roads that drivers will use intensively, as required for efficiency, instead of building unnecessary roads. Similarly, if a percentage tax on the value of the catch of fish finances the department of fisheries, then the department of fisheries has an incentive to adopt regulations that maximize the value of the catch in the long run. In general, financing the supply of a public good by a tax on its private complements will create an incentive for the state organization to maximize the supply of the public good.

In general, incentives for state administrators improve by replacing general tax revenues with financing from user fees or a tax on a private good that complements the public good produced by the state organization. The public sector needs more incentive-compatible financing, by which I mean financing that automatically rewards the efficient production of public goods.

Questions

1. In a presidential system, the legislature's committee structure often parallels the structure of the executive. To illustrate, the U.S. House Committee on Defense parallels the Department of Defense. Discuss some possible effects of parallel organization on the monitoring and behavior of administrative agencies.

2. Discuss ways to finance the Department of Commerce and the ministry of science by taxing private goods that complement the public goods supplied by these agencies.

SUMMARY AND CONCLUSION

Instead of being slaves that meticulously execute orders, ministries and state agencies exert independent influence in government. Administrators typically try to expand their organization beyond the size that maximizes net benefits to the public. Regulatees encourage or resist this expansion depending on whether they can control the ministry or state agency. Consequently, citizens, administrators, and regulatees disagree over the preferred size of state administration. In competitive democracy, politicians respond to the public, administrators, or regulatees depending on the strategy that maximizes votes.
Law and policy provide some means for controlling ministries and state agencies. Effective organization reduces the transaction costs of oversight, thus reducing the discretionary power of administrators. The discretionary power of administrators also shrinks when the constitution grants unilateral power of oversight to multiple principals, whereas the discretionary power of administrators expands when the constitution requires cooperation among multiple principals to exercise oversight.

Sometimes principals impose burdensome procedures on administrators engaging in activities disfavored by the principals. If the administrators can substitute a favored activity for the disfavored activity without jeopardizing appropriations, then increasing the transaction costs of one activity effectively diverts the agency's efforts to the other activity. Otherwise, the agency will continue engaging in the disfavored activity and absorb the additional transaction costs.

The behavior of ministries and state agencies forms part of the larger problem of the optimal number of governments. Elections ideally transmit the preferences of citizens to politicians, who translate preferences into programs implemented by ministries or agencies. To impede diversion and dilution by administrators, the fundamental laws can reduce the height and breadth of bureaucracy, which requires increasing the number of elections. Conversely, too many elections drain the reservoir of civic spirit that animates voters, leaving them uninformed and unmotivated. When too many elections alienate voters and make elected officials inconspicuous, the fundamental laws can reduce the number of elections by replacing governments with broader, deeper bureaucracies. In general, the constitution should splinter unmanageable bureaucracies by organizing more elections, and, conversely, the constitution should consolidate inconspicuous governments by increasing the depth of administration.

An Englishman allegedly kept a diary of the things he saw each day for use by scientists as "empirical evidence." Such a diary may interest historians, but it has little value for science. Scientific theories separate causes from background noise. Similarly, the stylized models in this chapter provide parables of administration to sort causes from background noise in the behavior of state agencies. A better understanding of state agencies can help democracy make administration resemble Weber's instrumental rationality rather than Kafka's irrational malevolence.

APPENDIX: PRICE EFFECTS AND THE PREFERENCES OF ADMINISTRATORS

The appendix uses the theory of consumer demand to explain more precisely how administrators respond to the transaction costs of supplying a particular

18 For examples of using alternative theories to test the textured, historical facts of government decisions, see Ackerman 1972 and Allison 1971.
19 Specific reform proposals to improve administration in the United States are in Pildes and Sunstein 1995.
public good. Assume that the state organization can supply public good $z_1$, which is depicted on the vertical axis in figure 7-6, or public good $z_2$, which is depicted on the horizontal axis. The lines in figure 7-6 represent combinations of the two goods that can be produced with given resources and procedures. At low levels of production of good $z_1$ that fall below $z_1$, individualized decision making reduces the cost of producing $z_1$. At high levels of production of good $z_1$ that rise above $z_1$, applying a rule reduces the cost of producing $z_1$. Unlike $z_1$, I assume for simplicity that applying a rule is always cheaper for supplying $z_2$. The line labeled "cheapest" uses the cheaper alternative between individualized decisions and rules for $z_1$ to produce a given combination of goods, while holding the agency’s budget constant.

To be concrete, $z_1$ might indicate “roads built through parks” and $z_2$ might indicate “roads built outside parks.” As depicted in figure 7-6, the requirement of individualized decision making for roads built through parks increases their relative cost when their quantity exceeds $z_1$.

Alternatively, $z_1$ might indicate “licensed nuclear power stations” and $z_2$ might indicate “licensed nuclear reactors for medical research.” As depicted in figure 7-6, the requirement of individualized decision making for licensing nuclear power stations increases their relative cost when their quantity exceeds $z_1$.

If the principal requires the agency in figure 7-6 to adopt individualized decision making for $z_1$, the agency will presumably respond to the increase in cost by switching resources from production of $z_1$ to production of $z_2$. To depict the extent of the switch, I have added the agency’s indifference curves in figure 7-7. These curves indicate the agency’s preferences for supplying the two public goods. The agency maximizes utility by moving along the production possibility curve to the point of tangency with an indifference curve. If the agency
can choose procedures freely, it maximizes utility by producing \((z_1^*, z_2^*)\). If the agency must use individualized decision making for \(z_1\), it maximizes utility by producing \((z_1', z_2^*)\). Notice that an increase in the cost of producing \(z_1\) causes its quantity to fall to \(z_1'\), whereas the quantity of \(z_2\) increases to \(z_2^*\). Thus the agency substitutes production of \(z_2\) for \(z_1\).

The ease of substituting \(z_2\) for \(z_1\) depends on the agency's preferences, which determine the shape of the indifference curves. The agency presumably prefers a larger budget and staff. Some uses of funds win the approval of politicians, who will reward the agency with higher appropriations in the future. Thus the agency's preferences in figure 7-7 depend on its strategy for winning political approval.

**Question:** Modify the agency's utility curves in figure 7-7 to indicate the change when \(z_2\) becomes harder to substitute for \(z_1\).