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PRODUCTION OF LEGAL RULES BY AGENCIES AND BUREAUCRACIES

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Abstract

The main questions which the literature on rule production by agencies and bureaucracies deals with are: To what extent should legislators delegate rule making to bureaucracy? How can procedural rules curb an agency's discretion in making substantive rules? Do legislators select bureaucratic decisions for oversight randomly or on the basis of complaints? Who exactly controls bureaucracy: some and which elements in the legislature or the judiciary? How does the process of bureaucratic rule making work inside an agency? This article reviews the literature with a special emphasis on the effect of procedural rules and on the spatial representation of the interplay between the bureaucracy and the legislature. It concludes by pointing out that more research should be conducted on the process of rule making within agencies and the underlying preferences.
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1. Introduction

The central question posed in the literature on the production of rules by agencies is how the discretion of law-making agencies can be curbed. The political preferences of bureaucracies are most often taken to be exogenously given. These may be the personal political preferences of the director of the single agency or may reflect the influence of interest groups. The influence of interest groups is hardly ever modeled explicitly in this literature. Based on more or less complete answers to the central question, explanations are given for why a legislator may want to delegate law-making power to bureaucracies and how control of this delegated power is to be organized. The key normative question is how much delegation there ought to be. However, answers given to this question barely rely on the positive analyses mentioned herein.

Current positive law and economics analyses of how agencies and bureaucracies (these two terms are used as synonyms herein) produce legal rules differ substantially from approaches applied to other law-making institutions. These analyses do not follow the Public Choice approach commonly used to explain the production of legal rules by legislators; nor do they follow the evolutionary approaches mostly used to explain production of rules by the court system. Theories dealing with bureaucratic law making do not derive, accordingly, one utility maximizing position of the bureaucratic decision makers (which are hardly ever modeled as multiple individuals); nor do these theories rely on the assumption that inefficient legal rules are challenged more often than efficient ones (so that the average of legal rules evolves towards a rather efficient state.) Only if the study of production of rules by the legislator concentrates on consequences of more than one institution needed to pass a law, do strong similarities with the approaches to bureaucratic rule production arise; no such similarities occur between theories of bureaucratic rule making and the evolutionary approach.

Comparing the literature on decision making by agencies and bureaucracies with the research on the production of legal rules by the legislator on the one side, and rule production by the judiciary on the other, not only demonstrates how the approaches to very similar problems differ, but also underlines a problem which only seems to be purely semantic: bureaucratic rule making and bureaucratic adjudication are analytically distinct, as are legislative rule making and judicial adjudication. If bureaucratic decisions are rule making, the Public Choice approach suggests itself for tackling bureaucratic rule making; if they are adjudication, an evolutionary approach seems to be more appropriate. The problem arises in much of the theoretical literature and holds true for many empirical studies. Single bureaucratic decisions or entire classes of bureaucratic decisions are often analyzed without having any thought about whether these decisions are rule making or adjudication.

The reason for the reluctance to distinguish between rule making and adjudication may be that the distinction is not as clear in American administrative law (see, for example, Rugge, 1987), as it would seem from the Administrative Procedures Act (5 U.S.C. §551 (4)-(7)). This lack of clarity may be a problem in other jurisdictions as well. As a result, very few authors in the field reviewed here mention the distinction at all (for example, Lupia and McCubbins, 1994b). It is therefore often not possible to restrict this review to the literature on bureaucratic rule making; research with regard to decisions made in single cases has to be referred to in many places. Likewise, some of the literature reviewed here may overlap with the literature discussed in the articles on regulation of contracts and on environmental regulation. Yet the emphasis of this chapter will be different: it deals with the 'production of legal rules by agencies and bureaucracies',

that is, with the rule-making activities of agencies and bureaucracies. I will, however, avoid making too many references to scholarly works on bureaucracies in general, if there is no specific relation to rule making (for an overview of this literature with special reference to Public Choice arguments see Benson, 1995).

The chapter is organized as follows: Sections 2 and 3, respectively, review the literature that describes how procedural rules, by framing the production of substantive rules by agencies, facilitate the control of agencies by their principal, that is, the legislator, and writings comparing the different ways in which the legislator is able to control a rule-making agency. The following two sections, 4 and 5, concentrate on the literature breaking down the legislator into its different institutions, including the courts in the analysis of constraints to bureaucratic rule production. Section 4 deals with econometric studies while Section 5 presents the spatial approach to the topic. Section 6 surveys works that ask normatively whether there ought to be delegation of rule production to agencies and bureaucracies at all. Section 7 reviews the few inquiries into the interior process of agencies which produce rules and Section 8 concludes.

2. Curbing Bureaucratic Discretion by Procedural Rules

Two distinct phenomena bring about bureaucratic discretion: one, the inability of legislative institutions to control perfectly the activities of bureaucracies at reasonable costs; the other, the need for cooperative action by legislative institutions, to sanction an agency or to replace bureaucratic rules by new statutory rules. Although a clear distinction between these phenomena cannot be maintained in reviewing all the publications, the first phenomenon is dealt with in this and the next section; the second in Sections 4 and 5.

As stressed by McCubbins, Noll and Weingast (1987) ('McNollgast'), the principal-agent relationship between legislators and bureaucracies cannot be dealt with appropriately by the mere reference to general principal-agent models of the Laffont-Tirole-Holmström-Milgrom type. The reason is that *ex post* sanctions, which are imposed after the bureaucracy deviates from the political preferences of the politicians, are far too limited, in view of low probabilities of detection, high monitoring costs, and the costs which legislators themselves must bear to impose sanctions (work, political backlash for poorly working agencies, further deterioration of the agency's work). Note however, that Mitnick (1975) emphasizes that one has to be careful with short- and long-run costs and benefits from control here: strict control by the principal may run up more costs than benefits in the short

run, but be profitable in the long run because agents become 'educated' by control, and strict control may result in a self-selection of 'good' agents. In McCubbins, Noll and Weingast (1989), the authors extend the reasons for the inappropriateness of the general principal-agent model to embrace the phenomenon to be discussed extensively in Section 5 of this chapter: the need for coordination among several institutions if control of bureaucratic rule production is to be exercised by the shadow of overriding statutory legislation.

McNollgast argue that the remaining, large problems of compliance may be partly solved by procedural rules. In this respect, procedural rules governing the agency's soliciting of information and the consequences of not doing so properly are most important: they may ensure that agencies base their decisions on large sets of information which would also be sufficient for legislative control. Soliciting information can only be successful if those who are better informed have enough incentives to disclose their information. This is, of course, the case if the stakes of affected groups in an issue are high or the issue is highly controversial. These variables, however, fail to be within the control of the legislator. The legislator is forced, thus, to concentrate on enacting procedural rules that modify the costs and the effectiveness of providing information to the bureaucracy.

McNollgast study such procedural rules. Public disclosure requirements facilitate political intervention of interest groups at early stages in the rule-making process, even earlier than in the legislative process. Thus, political intervention of interest groups may allow *ex ante* control of bureaucratic rule production. Elaborate rules of procedure result in high costs of rent seeking and, accordingly, favor those groups which have large resources to spend on representation. On the other hand, budget subsidies for poorly represented groups favor these groups, instead. Next, the discretion of the agency is limited by evidentiary standards, which refer to how evidence must be processed to come to a decision. Burden-of-proof rules may favor or hamper groups which base arguments on unclear cause-effect relationships. Further, '*ex parte*' rules serve to prohibit direct informal communication between private parties and an agency during the formal rule-making process. These rules variously provide for sanctions against prohibited *ex parte* communications, that run a gamut up to, at the extreme, imposing a final decision against the infringing group. *Ex parte* rules enable politicians to participate in the rule-making process, at least as brokers of communication. Also, politicians may exert direct pressure on agencies. For all these procedural rules to enable politicians to exert *ex ante* control, a judicial remedy for their infringement must be sufficiently likely to occur. This can be achieved by decentralized enforcement of these rules if private parties are able to sue at low costs.

McNollgast not only examine ways in which procedural rules and interest groups interact to curb decision making by bureaucrats and agencies, but also argue that politicians are not constrained to granting a policy which is currently favorable to some interest groups. McNollgast suggest politicians are able to ensure, for the future, that changes of legal (agency-made) rules are favorable to the interest groups which constitute the original coalition. This 'autopilot' for future decisions relieves the enacting coalition of the problem that future political majorities might favor other interest groups. The problem of 'slack' of future legislators as being opposed to regulatory slack in rule making is particularly stressed by Horn and Shepsle (1989) and by Steunenberg (1992). They emphasize that there is a trade-off between these two kinds of slack because constraints on either the agency or future legislators require freedom to act by the other institution.

McNollgast allow, against the thrust of their argument, that the control of agencies exercised by the interest groups may evolve in an unexpected direction, or be impeded altogether, if the interest groups that are engaged in the original deal with the legislator cease to exist. Macey (1992) discounts the importance of this caveat for three reasons, all related to the design of a newly-formed agency, and thus strengthens the thrust of McNollgast's argument: first, when interest groups agree with the legislator to institute a regulatory agency, the agreement is likely to cover institutional rules about what parties may influence the future agency's decisions and the ways influence can be exerted. For example, the influence of poorly organized groups may be secured by facilitating access, to individuals with an interest, to agency hearings or judicial review of agency decisions. Levine (1992) criticizes this argument on the basis that, while one may predict that liberalized standing will increase the degree of interference of the courts with regulatory drift, one is unable to predict easily the direction of this interference. This argument apparently neglects the results of evolutionary approaches to the common law (compare the literature following Rubin, 1977 and Priest, 1977), where predictions on the directions of judicial rule making are certainly possible, even if the court system is not systematically biased in some direction. If the court system is known to be biased, it is obvious that one may predict in what direction judge-made law will evolve.

Second, limiting the jurisdiction of a newly-installed agency to the regulation of a small number of industries, or even to part of a single industry, assures that expertise in the agency in this specialized field mainly will be recruited from the same industries or part of an industry. As a result, the points of view held by the agency and industry will usually concur. Accordingly, at least regulation in favor of the regulated industry is stable over time.

Third, when agencies compete for jurisdiction with each other, they seek out the support of constituents and hence will not deviate from the preferences of their constituency. The agency and its constituent interest group(s) thus mutually support each other in order to further their own *raison d'être* and improve their chances to survive over time. This mutual support together with the procedural rules mentioned above serve as an autopilot for rule making by the agency. A similar argument had already been forwarded by Benson (1981), Benson (1983a), and Benson (1983b) although Benson did not set forth the argument in terms of curbing regulative drift. Benson focuses on the size of the bureau and the problem of over-regulation. Johnson and Libecap (1994) drive home the argument that the rank and file of bureaucrats are interested in the duration of their agency to a point that they become an influential interest group in shaping long-run trends in bureaucratic institutions. With particular reference to the third argument (mutual support of regulator and regulated industry), Macey (1992) rejects Shepsle's (1992) view (also expressed by Horn and Shepsle, 1989, and by Steunenberg, 1992), that more emphasis should be placed on the trade-off between the regulatory and legislative slack. Macey claims that there is no such trade-off, but interest groups with political clout, which participate in the original, political decision to set up an agency, retain their political power by this mutual support and continue to exert a like influence on the legislator as well as on the agency.

Although both of the papers of McNollgast give case studies as empirical examples of their theory, Robinson (1989) casts severe doubts on the empirical relevance of McNollgast's argument. McNollgast argue that procedural provisions serve mainly as a curb on the discretion of agencies. Robinson points out that even most of the examples cited by McNollgast do not support their theory, much less do the examples introduced by Robinson himself. He contends, however, that McNollgast's approach could be very useful. If the empirical relevance of the argument were shown, it could substantially change and advance the understanding of the legal-administrative process.

In a related study, Rose-Ackermann (1995) compares how procedural rules enable interested (third) parties to control and interfere with bureaucratic rule making in Germany and the US. Contrary to the situation in the US, in Germany individual citizens hardly have any chance to control rule production by bureaucracies; this control only extends to applications of the rules. Rule making by bureaucracies in Germany is typically under the influence of well-organized interest groups, in the same informal way as statutory legislation is in both countries. Only in the US do procedural rules give the power to control bureaucratic rule making to interested parties which are not politically powerful in the legislative process anyway.

Hamilton and Schroeder (1994) call into question this entire line of reasoning. They ask why agencies would follow procedural rules more strictly than substantive rules. Though they do not enter into a theoretical discussion of the point of view, they do provide some empirical evidence that procedural rules are, in fact, circumvented. Agencies leave substantive rules incomplete and fill the gaps with extensive directives, guidance documents and policy memoranda, which fail to be rules in a formal sense and are not subject to formal rule-making procedures that require the participation of interest groups, in particular of those groups which are protected by procedural rules.

3. Police-Patrol Control versus Fire-Alarm Control

An issue closely related to the question of how procedural rules give control over bureaucratic rule making to third parties is the question of how legislators can best control agencies. The problem posed is whether legislators want to take a random sample of bureaucratic activity (including its rule-making activity) in the same manner in which a police patrol randomly inspects the streets; or whether legislators want to look at bureaucratic decisions only when and where someone protests against a particular decision with vehemence, in the same manner in which the fire department takes action only after someone sounds a fire alarm. I refer to this question as the optimal-type-of-control problem.

The leading articles that discuss the optimal-type-of-control problem (for an overview of the consequential literature until 1990 see Ogul and Rockmann, 1990) are McCubbins and Schwartz (1984) and Weingast (1984). These articles argue that, in general, Congress prefers fire-alarm to police-patrol oversight, because the costs of the monitoring activities are partly transferred from Congress itself to interested groups and individuals. However, citizens harmed by violations of legislative goals are not always represented by well-organized groups and, accordingly, are unable to sound alarms loud enough to obtain redress of grievances. The authors answer this criticism by referring to arguments like those in the previous section herein: disadvantaged groups often have public spokesmen; problems of collective action are overcome by legislation which favors the organization of interest groups, particularly affected by collective action problems; extensive constituent-service by congress(wo)men opens up review procedures.

In the optimal-type-of-control literature, there is no discussion of the social costs of fire-alarm oversight, but one might speculate that it is socially cheaper. With fire-alarm oversight, individuals, who are affected by bureaucratic rule making and will notice it anyway, detect regulatory slack;

with police-patrol oversight, legislators must fund specialized individuals to scrutinize bureaucratic decisions for which they have little inherent regard. The argument might, however, be weakened if one takes into account a problem like dispersed damages in tort law: the adverse effects of regulatory slack may be so dispersed, that sounding a fire alarm is too costly for anyone other than specialists hired to search for regulatory slack. This assumption, again, throws the argument partly back to the discussion of the previous section herein.

It is, however, unclear whether asymmetric degrees of organization among opposing interest groups can be completely offset by procedural rules. Hopenhayn and Lohmann (1996) study the results of asymmetric access to review procedures for a particular kind of fire-alarm oversight, where an agency's decision can be (partly) controlled before adverse effects on social welfare occur. A fire alarm can be sounded either: (i) only if the agency has allowed some regulated activity although the activity decreases social welfare; or (ii) in addition to this condition also if the agency prohibits a regulated activity although the activity would increase social welfare. If the political institutions rely on this kind of fire-alarm oversight, less activities will be allowed in case (i) than in case (ii). Hence, there may be adverse social welfare effects due to reliance on fire-alarm oversight, as opposed to some symmetric oversight system, possibly a police-patrol system.

Aberbach (1990) questions the theoretical findings of McCubbins and Schwartz (1984) and Weingast (1984) on factual grounds. They argue that Congress prefers fire-alarm to police-patrol oversight; he offers empirical evidence that Congress has increasingly used police-patrol oversight instead of only fire-alarm oversight. Ogul and Rockmann (1990) explain this finding by pointing to the greater resources employed by Congress (in particular more staff) to scrutinize agencies, where less means are allocated to new legislative activity because congress(wo)men have, in general, fewer opportunities to obtain name recognition through new legislation.

Lupia and McCubbins (1994a, 1994b) develop formal models of both police-patrol and fire-alarm oversight. They explore under what conditions each kind of control is superior to no oversight from the viewpoint of Congress-as-principal. The hardly surprising conditions they derive for police-patrol oversight being superior to no oversight are: large differences between an agency's and legislators' preferences; and low costs of oversight. Fire-alarm oversight is superior to no oversight: when high penalties are imposed for false fire alarms; or where the preferences of legislators and of interested groups or individuals that may pull the fire alarm are close to each other. Due to the disparate structure of their two models, Lupia and McCubbins fail to compare the two kinds of oversight with one another. After making exactly this point (Bawn, 1994), Bawn (1997) constructs

another formal model to carry out this comparison. This model again mainly restates the arguments of McCubbins and Schwartz (1984) in a formal way. By emphasizing that marginal costs of oversight are lower for members of the committee with jurisdiction over the agency than for other members of the chamber, she adds, however, the insight that the latter will prefer more fire-alarm-like or (as Bawn calls it in a slightly broader sense) statutory control.

Both Lindsay (1976) and Holmström and Milgrom (1991) express fundamental doubts as to whether an optimal degree of control over agencies can be defined merely by taking into account direct costs of control. They stress that agents that have multiple tasks, which the principal can monitor to different degrees, tend to carry out only tasks for which they will get credit, namely those tasks which the principal can monitor. Such agents neglect the tasks which the principal cannot monitor. By distorting the allocation of the agent's efforts, additional oversight may thus lead to indirect costs. As there is no common denominator in which to measure the net benefits reaped in the public sector, such as profits, the problem they discuss is particularly relevant to government bureaucracies.

4. Who Controls Bureaucratic Discretion: Econometric Approaches

While the literature discussed so far concentrates on how to overcome bureaucratic discretion by assuming a dichotomy between agencies and the legislature (as a unitary actor), many authors also ask who exactly controls the bureaucracy: which particular institution among several engaged in the legislative process? Or none of them, but an independent judiciary? Two strands of literature, only loosely intertwined, must be distinguished: econometric studies (discussed in this section) and theoretical arguments based on sequential games which describe strategic choices made between policies, represented by different points in a given policy space (discussed in Section 5).

Among the econometric approaches this article surveys, some authors ask which of several possible institutions controls an agency. Other authors test whether a particular institution controls an agency's decisions or not. A typical and prominent example for the first type of approach is Moe (1985) (also compare Moe, 1987). He takes the National Labor Relations Board (NLRB) as an example of an agency which could be influenced by the political preferences of the President of Congress and of the courts. His analysis clearly shows that all these institutions are important (changes in political orientation have a significant impact on the decisions of the NLRB), but the President has the most impact on the NLRB. The NLRB is

not a prominent example of rule production by agencies because its decisions are nearly all adjudicatory. Notwithstanding this limitation, Moe's paper may well be labeled as path-breaking: it lays ground for later econometric studies to inquire which institutions wield the most power over agencies that makes rules.

Beck (1987) employs a model less ambitious in comparing the power wielded over agencies by different institutions but more directly focused on rule production. He studies to what extent the US President is able to influence rule making within the Federal Reserve. In particular, he tests whether monetary policy of the Federal Reserve supports a political business cycle favorable to incumbent presidents. His findings are that the Fed does not actively support such cycles by inducing political monetary cycles but that it passively accepts such cycles induced by fiscal policy. Accordingly, Beck asserts that the President of the US exerts a certain but limited degree of power to control the Fed.

Probably the most extensive and detailed econometric study of bureaucratic rule production is conducted by Magat, Krupnick and Harrington (1986, p. 8). Their book aims at clarifying which factors influence bureaucratic decisions with regard to rule making. They test fourteen hypotheses derived from different theoretical approaches to bureaucratic rule making. Unfortunately, few of the results of the study are statistically significant, but most parameters do have the sign which should be expected from the theoretical argument. The same caveat holds for the work of Hamilton and Schroeder (1994), who study how much an agency will resort to 'informal' rule making (in the form of directives, guidance documents and policy memoranda issued by an agency) in order to avoid the control of formalized rule-making procedures.

Based on studies of the Food and Drug Administration (FDA), Olson (1995, 1996) compares not so much which political institutions exert power in controlling agencies; rather she contrasts different approaches to predict bureaucratic behavior. In particular, she compares capture theory (agencies are controlled by the industries they are supposed to regulate), public interest theory (agencies are the benevolent pursuers of social welfare), and Congressional control theory (legislative institutions, modeled by Olson as a unitary actor, control agencies). She finds that the behavior of one and the same agency is best explained by different theories or even by different combinations of theories for different industries which are regulated. Accordingly, she suggests that unless subsequent empirical studies focus on the micro-level trade-offs which face regulators, it is impossible to get a clear answer as to what are the important incentives in bureaucratic rule production. In order to formulate better explanations or even predictions of bureaucratic behavior, future research must be more sensitive to different

regulatory actions and their specific constraints and trade-offs for the regulator.

Hammond and Knott (1996) altogether reject econometric analyses of which institutions control the bureaucracy based on the correlation between, on the one hand, changes in preferences of an institution, and on the other hand, changes in policy of the agency. As they point out, it is impossible for one institution to control an agency without the cooperation of the other institutions. Thus, future empirical work on political control should incorporate the interplay of preferences of the controlling institutions. These authors do not develop, however, an operational measure of the power wielded by institutions over agencies, although they consider such a measure to be indispensable to conduct empirical studies.

5. Who Controls Bureaucratic Discretion: Spatial Approaches

The literature reviewed in Sections 2 and 3 explained the discretion exercised by bureaucrats by highlighting the superior information which agencies possess and explored the ways in which control of the bureaucracy is achieved. The literature discussed in this section takes a game-theoretic approach. This approach is based on preferences in a given policy space to show that bureaucratic discretion exists even without asymmetric information. The basic idea developed in this body of literature is that an agency can be sanctioned, for example, by new legislation that overrules decisions of an agency or interferes with the resources of the agency, only if more than one of the institutions agree to apply sanctions. If n institutions are needed to sanction an agency and every institution has single-peaked preferences in the policy space, Pareto sets of dimension n - 1 or less result. Within these Pareto sets, the agency is free to act because every change in policy makes at least one institution better off; accordingly, this 'winning' institution will be reluctant to sanction the agency. As legislative procedures become more complicated than simple acceptance by all relevant institutions, the models are formed as sequential games. In these games, institutions can veto, accept or amend proposals from institutions with the right to take the initiative, according to (a simplified version of) the constitution.

The starting point for this discussion is the paper by Weingast (1981). He develops a spatial policy model (one and two policy dimensions) that explains the bounds of agencies' decisions on regulation. Based on three examples (airlines, telecommunications and nuclear power), he studies the interplay between possibly more than one Congressional (sub)committee; interest groups which form the clientele of both the (sub)committee(s) and the agency controlled by the (sub)committee(s); and sometimes (namely if he

makes appointments to the agency himself) the President. Weingast shows how this interplay restricts the range of discretion of the agency. Weingast and Moran (1983) take the same approach to explain why there is scant evidence of Congressional oversight. They put forth this approach as an alternative to the dominant view in the literature at the time that this lack of evidence is due to major imperfections in the oversight exercised by Congress, due to Congress's lack of information. This approach argues, alternatively, that Congressional oversight is near perfect; accordingly, agencies do not even attempt to deviate from the preferences of the legislature. Weingast and Moran demonstrate that their theory explains better than an imperfect-oversight theory would why Congress was extraordinarily active in its oversight of the Federal Trade Commission (FTC) in 1979-80, after a turnover in the members of the appropriate Senate subcommittee: the FTC temporarily lacked sufficient information on new constraints imposed on its discretion by new Senate subcommittee members, and the FTC deviated involuntarily from the preferences of the subcommittee. Finally, Weingast and Moran test their theory econometrically. Their econometric analysis is challenged by Muris (1986) and successfully defended by Weingast and Moran (1986). Econometric support for their theory is also offered in the paper of Faith, Leavens and Tollison (1982). They reject the claim of Katzmann (1980) (who relies exclusively on a non-statistical analysis of interviews conducted on members of the FTC) that the decisions of the FTC are independent of Congressional influence and of efforts to maximize the budget of the Commission. Instead, they offer compelling econometric evidence that both the House and the Senate have a substantial impact on the selection of cases by the FTC, though the impact of the Senate seems to vanish after sweeping reforms were carried out in 1970 on the FTC.

In ensuing years, the approach of Weingast has been criticized, mainly for its simplifying assumptions on Congressional legislative procedures (see for example, Moe, 1987). Complicating assumptions, however, were only introduced into the model in the early 1990s. Two papers, by Ferejohn and Shipan (1990) and Gely and Spiller (1990), written independently of each other, incorporate in the model judicial review of administrative decisions, as well as Presidential veto to Congressional override of both decisions of agencies and judicial review of decisions of agencies. The preferences of agencies are assumed to be identical to those of the President (this flaw is overcome by Steunenberg, 1992). Ferejohn and Shipan allow for an override of a Presidential veto by a two-thirds majority in Congress which is modeled as a unicameral legislative body. In a different vein, Gely and Spiller abstract from the opportunity to override a Presidential veto but treat the House and the Senate as two different (unitary) agents and extend the model to a two-dimensional policy space. A final important difference between the

two models is that judicial control is restricted to replacing the agency's issuance of new rules by the *status quo ante* in the paper of Ferejohn and Shipan. In variations of the model of Gely and Spiller, the courts act as a kind of super-agency able to replace the agency's choice of a new rule with whatever policy the courts prefer most (subject to the threat of new legislation).

Ferejohn and Shipan deduce that the next (namely judicial) step in the control of policy making by agencies restricts the power of agencies, and makes agencies more responsive to the preferences of the current (not the originally enacting) legislature. In a comment to this article, Spitzer (1990) studies some cases in which agencies have preferences which differ from those of the President. In another comment, Rose-Ackerman (1990) expresses the criticism that it is unclear why Congress should allow its own committee to deviate as much from Congress's own preferences as is assumed in the Ferejohn and Shipan paper and, more related to the general approach adopted by Ferejohn and Shipan, that it might substantially increase the agency's and the court's discretion and influence to abandon the assumption of costless Congressional action.

The paper by Gely and Spiller yields the same result with respect to judicial control over an agency: the reduction in the discretion of an agency is substantially greater if courts are able to impose the policy they prefer most. Allowing the President to have preferences different from those of an agency forces Gely and Spiller to introduce a second dimension in the policy space. Only then can they demonstrate how an increase in the number of institutions that must cooperate to enact a statute increases the dimension of the Pareto set which defines the discretion of an agency. They apply their model to two cases decided by the Supreme Court. The examples show how the ruling of an agency changes after and due to a change in the preferences of the legislature.

Formalizing the presentation of the spatial approach, thus far most often based on a graphical exposition, Hammond and Knott (1996) show that any number of dimensions of the policy space and a complete model of US institutions are tractable by this approach. They set forth a formal model. They include all five institutions most relevant to American legislation: the House, the Senate, the relevant committees of both (some multi-person institutions are even divided into their members) and the President. They include two alternative procedures of legislation: majority of House and Senate and approval by President as well as 2/3 majority of the House and Senate. The judiciary is added in an informal way, which may be more appropriate than the alternative approaches chosen by Ferejohn and Shipan (1990) and Gely and Spiller (1990). The power of the judiciary is reduced to stretch the set of legal policies constraining the agency in the direction preferred by the judiciary. And Hammond and Knott include in their model

the President's ability or inability to fire an agency director. Complicating the assumptions in the analysis does not provide new insights into how, in theory, bureaucratic discretion changes when additional institutions are included in the model. But they offer the insight that the results of less comprehensive models are not due to their simplifying assumptions. The stress in the paper of Hammond and Knott is, however, laid on the conclusion that it is impossible to give a clear answer to the question of who really controls an agency; control is exerted by the interplay of institutions. Thus, they reject empirical studies into the power of controlling institutions if such studies are based on correlations between changes in the preferences of the allegedly controlling institutions and agency policy.

A general problem in the literature is, of course, that the assumptions on information about the preferences of other agents are as strong as they are for most models of sequential games. One should not overemphasize this problem, though, because spatial approaches to bureaucratic discretion have to be seen as a complement to the literature basing the explanation of bureaucratic discretion on incomplete information.

While the earlier articles, which take spatial approaches (this section) or optimal-type-of-control approaches (Section 3) to bureaucratic discretion include but references to the other approach, only Epstein and O'Halloran (1995) integrate both spatial and optimal-type-of-control approaches in one formal model. These authors assume that only interest groups and the agency are completely informed about the state of the world and hence know what policy they prefer most. The legislator (modeled as a unitary actor and thus re-simplified as compared to the newer spatial literature) only knows its most preferred policy as a function of the true state of the world. When an agency proposes a policy change to the legislator, the legislator may accept or reject the proposal, but not amend it. From the legislator's perfect knowledge of the preferences of the other actors, the rule proposed by the agency, and the reaction of the interest groups (which sound a fire alarm or not), the legislator is able to deduce a piece of information about the true state of the world and react accordingly. The most important result derived from this model is that the legislator can deduce the most information from the reaction of an interest group if the legislators' most preferred policy lies between those of the agency and the interest group. Less information can be deduced if the interest groups' most preferred policy is at the center. No information can be deduced if the agency's most preferred policy is at the center. The reaction of more interest groups increases the information deduced by the legislator only if the interests of the additional groups differ more than, and in the same direction as, the preferences of the legislators differ from the most preferred policy of the agency.

6. Ought there be a Delegation of Rule-Making Power to Agencies and Bureaucracies?

While the literature discussed thus far looks at the positive questions of how bureaucratic discretion in rule production can best be controlled by the legislature (Sections 2 and 3) and which particular institution controls agencies (Sections 4 and 5), other authors ask more fundamentally whether there ought to be delegation of rule making to the bureaucracy from the point of view of the legislature or society. Since answers to the positive questions mentioned above are mostly based on fire-alarms control by the same interest groups which influence the legislation, most authors neglect the problems discussed by the capture theory of regulation. They do not even perceive them as problems, if capture works in favor of the same groups in both legislation and bureaucratic rule making. This is different for the normative question discussed in this section.

Imperfect control of agencies can only be used as an argument against having a delegation of rule-making authority from the legislator to the bureaucracy for three reasons: (1) a bureaucrat (agency director) has political preferences differing from those of the legislator; (2) a bureaucrat (agency director) exploits his superior knowledge for his own non-political advantage as described by Niskanen (1971, 1975) (also compare Migué and Belanger, 1974); (3) an agency gets captured by the regulated industry more than the legislator. The first reason vanishes if the legislator can choose the bureaucrat. The second reason either coincides with the third or does not systematically interfere with the content of rules produced by agencies except for the case where some rules allow collusion of an agency with the regulated industry or firm and consequential rent sharing while other rules do not allow this. An example for such a case is discussed by Laffont and Tirole (1990). They conclude that for the case of price regulation it might be reasonable not to delegate to the agency the decision between (average-)cost-plus pricing and marginal-cost pricing with a transfer to the firm(s) covering the fixed costs.

The third reason is discussed more extensively. Contradicting Page (1981), Wiley (1986) argues (the argument is reinforced in Wiley, 1988) that there is no general evidence that regulated entities have a disproportionate influence upon regulatory agencies. Accordingly, the decision to delegate regulatory rule making to an agency ought to rest mainly on the agency's advantages and disadvantages in dealing with specific rule production as compared to the legislator himself. This argument is refuted by Spitzer (1988) who claims with reference to Fiorina (1977, pp. 15-29) that rule making by agencies is more apt to capture by interest groups than rule making by the legislator because the latter uses the agency to shirk responsibility for the costs imposed by regulation, while

claiming credit for the benefits at the same time (also compare Vaubel, 1991, who applies the same argument to the supranational European legislative institutions; and Moe, 1989). Wiley (1988) points to the many other reasons for a legislator to delegate specific rule making to a bureaucracy in order to reduce the importance of the argument of Spitzer (1988). Referring to better responsiveness of the law to specific local conditions, Mashaw (1985) supports this pro-delegation position. Bawn (1995) compares costs and benefits faced by the legislator from delegation of rule making in a formal model. She shows that the legislator will balance marginal costs incurred as a result of a loss of control through the delegation with marginal benefits reaped as a result of the better fit between agency decisions and specific cases. Her model uses quite specific functional forms but can be generalized easily.

Spulber and Besanko (1992) argue that a problem similar to capture may arise from the way the regulator and the regulated firm or industry interact. If the former is able to commit to some environmental quality standard, that is, if the regulator is a Stackelberg leader, then it is sufficient to choose an agency director with political preferences similar to those of the legislator. However, if the regulator is unable to commit to a specific environmental quality standard but is likely to adapt the standard to the firm's or industry's activities (levels of output and levels of pollution), that is, if the relationship between regulator and regulated industry or firm is Nash, then an optimizing legislator will choose an agency director with preferences deviating from its own and will enact statutory limits to bureaucratic standard setting. The answer which Spulber and Besanko give to the question as to whether or not statutory limits ought to be imposed on regulatory discretion depends upon whether the relationship between the regulator and the regulated firm or industry is Stackelberg or Nash. In addition, their answer to the question *in what direction* these limits should be erected also depends on the circumstances of the specific case. As stressed by Arvan (1992), the ambiguities can only be cleared up by empirical studies. The result of Spulber and Besanko (1992) are ambiguous even though they abstract from important aspects influencing the degree of *ex ante* statutory constraints on regulatory agencies, such as judicial review, problems of incomplete information on the technology (legislators have to know the technology up to one parameter which does not influence complementarity or substitutiveness of pollution abatement and production costs), and incomplete knowledge of the preferences of other political actors (Ross, 1992).

If non-delegation is assumed to be the only alternative, the question whether there ought to be a delegation of rule-making power to agencies and bureaucracies is only incompletely answered. In his structural approach to law, Cooter (1996a) (also 1994a, 1996b) argues that, among rule-making

bodies, agencies should make as few rules as possible because they do not follow social norms to the extent that courts do or at least ought to. Following social norms which evolve from efficient incentive structures (that is, social settings in which spillovers to groups not engaged in the social formation of the norms do not exist nor do evolutionary traps resulting from non-convexities exist) are better than rules issued by law makers such as legislators or regulatory agencies and bureaucracies (that is, constructivist law makers in a Hayekian sense.)

Kaplow (1992), too, deals with the role of the courts in the question of whether to delegate rule-making authority to agencies. Yet he does not see rule production by courts as an alternative to rule production by agencies. Rather, he emphasizes that non-delegation is only possible if the legislator includes overly general clauses in statutes. Thus, courts are forced to deduce concrete standards from the general clauses and do so necessarily after the regulated firm or industry has acted, whereas rules set by agencies are promulgated before a regulated firm or industry acts. Regulation by *ex post* standards is inferior to (bureaucratic) regulation by rules if and only if the costs measured per case of formulating *ex ante* rules which are readily applicable outweigh the costs which result from less precise standards. Thus, if and only if the law under review is relevant to frequent behavior of a clearly distinguishable type, bureaucratic regulation through rules will be superior to regulation by standards which courts interpret from statutes.

With the same problem in mind, Fiorina (1982, 1986) tries to develop a model that shows how legislative decisions to delegate rule interpretation (and thereby making of new, less abstract rules) to the courts or to an agency depend on the substantive preferences of the legislators. Unfortunately, all his results depend on incorrect graphical representations of expected utilities of legislators and, in the 1982 article, also on the assumption of bell-shaped utility functions of legislators (compare also Nichols, 1982). Accordingly, the results are not reported herein.

Finally, Rubin and Cohen (1985) mention a third alternative to delegation of rule making to agencies. Law (in particular regulatory statutes) should be made more concrete and enforced by private firms and not by state agencies for several reasons: the legislator (the state) must merely formulate policies on a general, aggregate level and does not have to deal with specific technologies. These technologies can be decided upon by the private law enforcer who signs a contract to pay some (positive or negative) per unit tax on the aggregate level of pollution or safety or other regulatory targets. Then, he may require firms to abide by a standard or to pay a fee sufficient to cover the tax. Hence, which technology is used becomes a decision subject to market forces. The private enforcer has stronger (monetary) incentives than an agency. The rules governing the relationship between the firms and

the enforcer become more efficient because evolutionary theory of efficient common law is applicable as both sides have long-lasting economic stakes in these rules. The basic idea of the paper is to make existing substantive regulation a property right (entitlement) of the private enforcement agency, and the absence of some regulation a property right of the regulated industry. The property right becomes valuable for the enforcer by paying him some money for avoided (statistical) damages (for example, saved statistical lives) and making the enforcer liable for (statistical) damages. Property rights being thus clearly defined will be reallocated in a Pareto-optimal way by Coasean bargaining.

7. The Rule-Production Process Itself

Little has been written in the law and economics literature on how rules are actually produced by agencies and bureaucracies, although taking this approach might substantially clarify the relevance of different arguments with respect to control of bureaucratic rule production by the legislator and its branches. One of the few examples of this approach is the paper contributed by McCubbins and Page (1986). They conclude that decentralized incentives within agencies are too flexible for congress(wo)men who want close control over an agency and, perhaps more importantly, that incentives in an agency are such that agencies do not strive for positive overall results but for countable 'beans' (for example, a ban on dioxin instead of the improvement of public health). If research were to take these insights into account, the models constructed to predict the degree and relevance of bureaucratic discretion would gain in explanatory power.

In developing concise models of bureaucratic rule production, law and economics scholars might have to take a close look at general descriptions of the rule-making process, such as the book of Kerwin (1992) and case studies like those of Fox (1987) and McGarity (1991). And more descriptive studies of this kind might be needed. Kerwin thoroughly describes the legal background and actual process of rule making at the federal level in the US. Though he does not make a consistent theoretical approach, let alone rely on economic theory, his study is very helpful as a starter and as background knowledge for any scholar not wholly familiar with the US institutions. On the basis of three cases, Fox describes how decision making in the FTC changes with the chairman of the Commission. McGarity studies the effects of having different types of employees working for regulatory agencies. He contrasts the 'techno-bureaucratic rationality' for rule making of one group of employees with the 'comprehensive analytical rationality' of the other. The former group, professionals who typically have technical or legal

training, draft rules without paying much attention to economic trade-offs. The latter group, young economists trained in an anti-regulative atmosphere, entered agencies during the 1970s. McGarity uses the term 'comprehensive' to stress that the ideal pursued by this second group is an open-ended decision-making process based on the quantitative comparison of all possible routes to a goal, which in turn may be defined as quantitative cost-benefit analysis. Based on a large number of case studies, he discusses different institutional settings within bureaucracies which may promote or hinder the relevance of cost-benefit analysis to bureaucratic rule making. Yet McGarity notes that at first, many of the analysts with thorough microeconomic training went too far in replacing pro-regulation biases of techno-bureaucrats with anti-regulation biases. In his opinion, the different but equally-strong biases of the young economists neither furthered their goals nor overcame traditional and still-dominant engineering and legal orientations to bureaucratic rule making. Were case studies such as those of Fox and McGarity to be turned into models of bureaucratic behavior (adding the preference side to the constraints thus far discussed in the literature), much would be gained in understanding, predicting and evaluating rule production by agencies.

An early theoretical approach, which unfortunately did not find many followers, is the study conducted by Breton and Winetrobe (1982). They explain the reason for the lack of economic discussion of what happens inside bureaucracies (both public and private!) is a seeming absence of property rights and competition in bureaucratic interactions. Introducing a theory of trust as an instrument which backs intertemporal contracts, they succeed in establishing an analogy to a pure barter economy. Concentrating on Schumpeterian competition instead of neoclassical price competition, they even construct market-like 'networks' within bureaucracies. By combining trust and Schumpeterian competition, they can explain not only many of the alleged inefficiencies in bureaucracies but also the existence of particularly efficient bureaucratic organizations which replace market exchanges to a greater degree than transaction cost arguments are able to justify. Unfortunately, it seems that it would be difficult to apply this innovative theory to rule production by public bureaucracies. Johnson and Libecap (1994) make further progress (based on more-standard, neoclassical assumptions) toward understanding what happens inside bureaucracies but, like Breton and Winetrobe, they do not concentrate on rule making.

Notwithstanding these problems with positive approaches, some articles and books deal with normative questions of how rules ought to be made by agencies and on what arguments decisions of agencies should be based. For example, Breyer (1985) emphasizes that it, of course, would be most appropriate to base regulation entirely on simple economic models, but that this is often impossible because resulting policies would lack practicability.

Still, economic models ought to be used to organize regulators' analyses and focus their attention on the relevant questions (McGarity, 1991 is clearly supportive of this point).

Ribstein and Kobayashi (1996a, 1996b) discuss a different kind of rule production by agencies. These authors look at agencies which only draft rules which a legislator subsequently may enact or amend. In particular, they discuss the effects and the efficiency of the National Conference of Commissioners on Uniform State Laws (NCCUSL), which provides fully-formulated drafts of statutes to state legislatures. They claim that this procedure may have advantages over enacting federal laws but that it is clearly worse than free competition among diverse state laws, which would result in an evolution towards the most efficient laws (for example, other jurisdictions copy provisions out of corporations code of Delaware because many firms choose to incorporate in that jurisdiction). These authors allow that model codes facilitate competition between jurisdictions and overall law making by exploiting economies of scale. Yet they point out that private institutions such as the American Bar Association draft model laws more dispassionately. Agencies like the NCCUSL are claimed to be too easily influenced by interest groups. The reviewer comments that the reference which these authors make to capture theory is relevant only if the agencies have a monopoly of the supply of model laws for if they do not, private institutions are free to provide *additional* competing drafts.

8. Conclusion

Both the positive and the normative literature on the rule production by agencies and bureaucracies is still incomplete, and further work is necessary and seems to be promising. Substantial progress has been made in the positive literature concerning the constraints of regulatory rule production. Yet it is still particularly difficult to derive a complete microeconomic model which describes or predicts the rule-producing behavior of agencies because the political preferences of agencies and bureaucracies have hardly been discussed outside capture theory. Capture theory suffers from weak econometric support and, if taken seriously, would make many of the problems posed in the literature based on positive political theory obsolete. Bureaucratic preferences obviously are not determined by a single individual but are the result of a decision-making process *within* a bureaucracy. Models of this process would substantially facilitate understanding and prediction of the rule-making behavior of agencies.

On the normative side, due to the lack of complete positive theories on bureaucratic decision making constrained by legislative and judicial

oversight, arguments often do not seem to be too strong because normative conclusions cannot be based on a clear relationship between institutional settings and their welfare effects. Hence, much of this literature must be based on ideological premises concerning the behavior of agencies and bureaucracies.

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Bibliography on Production of Legal Rules by Agencies and Bureaucracies (9300)

Aberbach, Joel (1990), *Keeping a Watchful Eye*, Washington, Brookings Institution.

Arvan, Lanny (1992), 'Delegation, Commitment, and the Regulatory Mandate: Comments', **8** *Journal of Law, Economics, and Organization*, 159-164.

Bagnoli, Mark and McKee, Michael (1991), 'Controlling the Game: Political Sponsors and Bureaus', **7** *Journal of Law, Economics, and Organization*, 229-247.

Bainbridge, Stephen M. (1991), 'The Short Life and Resurrection of SEC Rule 19c-4', **69** *Washington University Law Quarterly*, 565 ff. Reprinted in 1992 *Securities Law Review* 377.

Bainbridge, Stephen M. (1995), 'Incorporating State Law Fiduciary Duties Into the Federal Insider Trading Prohibition', **52** *Washington and Lee Law Review*, 1189 ff. Reprinted in *Corporate Practice Commentator*, **38**, 1996, 1.

Bawn, Kathleen (1994), 'Bureaucratic Accountability For Regulatory Decisions: Comment on Lupia and McCubbins', **57** *Law and Contemporary Problems*, 139-142.

Bawn, Kathleen (1995), 'Political Control versus Expertise: Congressional Choices About Administrative Procedures', **89** *American Political Science Review*, 62-73.

Bawn, Kathleen (1997), 'Choosing Strategies to Control the Bureaucracy: Statutory Constraints, Oversight, and the Committee System', **13** *Journal of Law, Economics, and Organization*, 101-126.

Beck, Nathaniel (1987), 'Elections and the Fed: Is there a National Monetary Cycle?', **31** *American Journal of Political Science*, 194-216.

Benson, Bruce L. (1981), 'Why are Congressional Committees Dominated by "High Demand" Legislators?', **48** *Southern Economic Journal*, 68-77.

Benson, Bruce L. (1983a), 'The Economic Theory of Regulation as an Explanation of Policies Toward Bank Mergers and Holding Company Acquisitions', **28** *Antitrust Bulletin*, 839-862.

Benson, Bruce L. (1983b), 'High Demand Legislative Committees and Bureaucratic Output', **11** *Public Finance Quarterly*, 259-281.

Benson, Bruce L. (1989), 'Further Thoughts on Rent Seeking, Bureaucratic Output, and the Price of Complements', **63** *Public Choice*, 279-281.

Benson, Bruce L (1990), *The Enterprise of Law: Justice Without the State*, San Francisco, Pacific Research Institute for Public Policy.

Benson, Bruce L. (1994), 'Third Thoughts on Contracting Out', **11** *Journal of Libertarian Studies*, 44-78.

Benson, Bruce L (1995), 'Understanding Bureaucratic Behavior: Implications from the Public Choice Literature', **13** *Journal of Public Finance and Public Choice/ Economia delle Scelte Pubbliche*, 89-117.

Benson, Bruce L. and Greenhut, Melvin L. (1986), 'Interest Groups, Bureaucrats and Antitrust: An Explanation of the Antitrust Paradox', in Grieson, Ronald E. (ed.), *Antitrust and Regulation*, Lexington, MA, Lexington Books, 53-90.

Benson, Bruce L. and Mitchell, Jean (1988), 'Rent Seekers Who Demand Government Production: Bureaucratic Output and the Price of Complements', **56** *Public Choice*, 3-16.

Benson, Bruce L., Greenhut, Melvin L. and Holcombe, Randall (1987), 'Interest Groups and the Antitrust Paradox', **6** *Cato Journal*, 801-817.

Benson, Bruce L., Rasmussen, David W. and Sollars, David L. (1995), 'Police Bureaucrats, Their Incentives, and the War on Drugs', **83** *Public Choice*, 21-45.

Bos, P.V.F. (1994), 'Van Ontvoogding naar Ontgoocheling of van Interstatelijkheid naar Communautaire Dimensie? (From Guardianship to Illusion or From a State to a Community Perspective)', **69** *Nederlands Juristen Blad*, 906-911.

Breton, Albert and Winetrobe, Ronald (1982), *The Logic of Bureaucratic Conduct*, Cambridge, Cambridge University Press.

Breyer, Stephen G. (1985), 'Economists and Economic Regulation', **47** *University of Pittsburgh Law Review*, 205-218.

Centner, Terence J. (1995), 'Organically-Produced Food Products: Regulations from the European Union and the United States Set the Stage for Imports', **7(4)** *Journal of International Food and Agribusiness Marketing*, 41-58.

Centner, Terence J. and Lathrop, K.W. (1996), 'Differentiating Food Products: Organic Labeling Provisions Facilitate Consumer Choice', **1** *Drake Agricultural Law Review*, 30-50.

Cooter, Robert D. (1994a), 'Structural Adjudication and the New Law Merchant: A Model of Decentralized Law', **14** *International Review of Law and Economics*, 215-231. Reprinted under the title, 'The Structural Approach to Decentralizing Law: A Theory of Games and Norms', in a book edited by Gerard Hertig.

Cooter, Robert D. (1994b), 'Decentralized Law for a Complex Economy', **23** *Southwestern Law Review, Hayek Symposium*, 443-451.

Cooter, Robert D. (1996a), 'Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant', **144** *University of Pennsylvania Law Review*.

Cooter, Robert D. (1996b), 'The Theory of Market Modernization of Law', **16** *International Review of Law and Economics*, 141-172.

Eckert, Ross D. (1981), 'The Life Cycle of Regulatory Commissioners', **24** *Journal of Law and Economics*, 113-120.

Eijlander, Ph. (1996), 'Regulering van de Kwaliteit van Zorginstellingen (Regulating the Quality of Care Organizations)', in Gestel, R.A.J. van et al. (eds), *Markt en Wet*, Deventer, W.E.J. Tjeenk Willink, 209-219.

Epstein, David and O'Halloran, Sharyn (1995), 'Theory of Strategic Oversight: Congress, Lobbyists, and the Bureaucracy', **11** *Journal of Law, Economics, and Organization*, 227-255.

Faith, Roger L., Leavens, Donald R. and Tollison, Roger D. (1982), 'Antitrust Pork Barrel', **25** *Journal of Law and Economics*, 329-342.

Ferejohn, John A. (1987), 'On a Structuring Principle for Administrative Agencies', in McCubbins, Mathew D. and Sullivan, Terry (eds), *Congress: Structure and Policy*, Cambridge, Cambridge University Press.

Ferejohn, John A. and Shipan, Charles (1990), 'Congressional Influence on Bureaucracy', **6(S)** *Journal of Law, Economics, and Organization*, 1-20.

Fiorina, Morris P. (1977), *Congress: Keystone of the Washington Establishment*, New Haven, CT, Yale University Press.

Fiorina, Morris P. (1982), 'Legislative Choice of Regulatory Forms: Legal Process or Administrative Process?', **39** *Public Choice*, 33-66.

Fiorina, Morris P. (1986), 'Legislator Uncertainty, Legislative Control, and the Delegation of Legislative Power', **2** *Journal of Law, Economics, and Organization*, 33-51.

Fox, Eleanor M. (1987), 'Chairman Miller, the Federal Trade Commission, Economics, and Rashomon', **50(4)** *Law and Contemporary Problems*, 33-55.

Frech, H. Edward III and Samprone, Joseph C., Jr (1980), 'The Welfare Loss of Excess Nonprice Competition: The Case of Property-Liability Insurance Regulation', **13** *Journal of Law and Economics*, 429-440.

Fuchs, Edward Paul and Anderson, James E. (1987), 'Institutinalizing Cost-Benefit Analysis in Regulatory Agencies', in Nagel, Stuart S. (ed.), *Research in Public Policy Analysis and Management, Volume 4*, Greenwich, CT, JAI Press, 187-211.

Gely, Rafael and Spiller, Pablo T. (1990), 'A Rational Choice Theory of Supreme Court Statutory Decisions with Applications to the State Farm and Grove City Cases', **6** *Journal of Law, Economics, and Organization*, 263-300.

Greenhut, Melvin L. and Benson, Bruce L. (1989), *American Antitrust Law in Theory and in Practice*, Aldershot, Avebury.

Grier, Kevin (1984), *The Political Economy of Monetary Policy*, PhD dissertation.

Hamilton, James T. and Schroeder, Christopher H. (1994), 'Strategic Regulators and the Choice of Rulemaking Procedures: The Selection of Formal vs. Informal Rules in Regulating Hazardous Waste', **57** *Law and Contemporary Problems*, 111-160.

Hammond, Thomas H. and Knott, Jack H. (1996), 'Who Controls the Bureaucracy?: Presidential Power, Congressional Dominance, Legal Constraints and Bureaucratic Autonomy in a Model of Multi-Institutional Policy-Making', **12** *Journal of Law, Economics, and Organization*, 119-166.

Hatzis, Aristides N. (1998), 'Mancur Olson, Jr (1932-1998)', **1** *Episteme and Koinonia*.

Hatzis, Aristides N. (1999), 'Rent-Seeking and Vested Interests', in O'Hara, Phillip (ed.), *Encyclopedia of Political Economy*, London, Routledge.

Holmström, Bengt and Milgrom, Paul R. (1991), 'Multitask Principal-Agent Analysis: Incentive Contracts, Asset Ownership, and Job Design', **7** *Journal of Law, Economics, and Organization*, 24-52.

Hopenhayn, Hugo and Lohmann, Susanne (1996), 'Fire Alarm Signals and the Political Oversight of Regulatory Agencies', **12** *Journal of Law, Economics, and Organization*, 196-213.

Horn, Murray J. (1995), *The Political Economy of Public Administration - Institutional Choice in the Public Sector*, Cambridge, Cambridge University Press.

Horn, Murray J. and Shepsle, Kenneth A. (1989), 'Commentary: Administrative Process and Organizational Form as Legislative Responses to Agency Costs', **75** *Virginia Law Review*, 499-508.

Johnson, Ronald N. and Libecap, Gary D. (1994), *The Federal Civil Service System and the Problem of Bureaucracy*, Chicago, University of Chicago Press.

Kaplow, Louis (1992), 'Rules Versus Standards: An Economic Analysis', **42** *Duke Law Journal*, 557-629.

Kaplow, Louis (1995), 'A Model of the Optimal Complexity of Legal Rules', **11** *Journal of Law, Economics, and Organization*, 150-163.

Katzmann, Robert A. (1980), *Regulatory Bureaucracy: The Federal Trade Commission and Antitrust Policy*, Cambridge, MA, MIT Press.

Kerwin, Cornelius (1992), *Rulemaking: How Government Agencies Write Law and Make Policy*, Washington, DC, CQ Press.

Kobayashi, Bruce H. and Ribstein, Larry E. (1996), 'Evolution and Spontaneous Uniformity: Evidence from the Evolution of the Limited Liability Company', **34** *Economic Inquiry*.

Laffont, Jean-Jacques and Tirole, Jean (1990), 'The Politics of Government Decision Making: Regulatory Institutions', **6** *Journal of Law, Economics, and Organization*, 1-31.

Landy, Marc K., Roberts, Mark J. and Thomas, Stephen R. (1990), *The Environmental Protection Agency: Asking the Wrong Questions*, Oxford, Oxford University Press, 309 p.

Lemieux, Vincent (1991), *Les Relations de Pouvoir dans les Lois - Comparaison entre les Gouvernements du Québec de 1944 à 1985* (Power Relations in Laws - Comparison Between Quebec Governments from 1944 to 1985), Sainte-Foy, Presses de l'Université Laval.

Levine, Michael E. (1992), 'Organizational Design and Political Control of Administrative Agencies: Comment', **8** *Journal of Law, Economics, and Organization*, 119-125.

Lewis, Tracy and Poitevin, Michel (1997), 'Disclosure of Information in Regulatory Proceedings', **13** *Journal of Law, Economics, and Organization*, 50-73.

Lindsay, Cotton M. (1976), 'A Theory of Government Enterprise', **84** *Journal of Political Economy*, 1061-1077.

Lupia, Arthur and McCubbins, Mathew D. (1994a), 'Learning from Oversight: Fire Alarms and Police Patrols Reconstructed', **10** *Journal of Law, Economics, and Organization*, 96-125.

Lupia, Arthur and McCubbins, Mathew D. (1994b), 'Designing Bureaucratic Accountability', **57** *Law and Contemporary Problems*, 91-126.

Macey, Jonathan R. (1992), 'Organizational Design and Political Control of Administrative Agencies', **8** *Journal of Law, Economics, and Organization*, 93-110.

MacKay, Robert J., Miller, James C., III and Yandle, Bruce (1987a), 'Public Choice and Regulation: An Overview', in MacKay, Robert J., Miller, James C., III and Yandle, Bruce

(eds), *Public Choice and Regulation: A View from Inside the Federal Trade Commission*, Stanford, Hoover Institute Press, Stanford University, 3-12.

MacKay, Robert J., Miller, James C., III and Yandle, Bruce (eds) (1987b), *Public Choice and Regulation: A View from Inside the Federal Trade Commission*, Stanford, Hoover Institute Press, Stanford University, 363 p.

Magat, Wesley A., Krupnick, A. and Harrington, W. (1986), *Rules in the Making: A Statistical Analysis of Regulatory Agency Behavior*, Washington, Resources for the Future.

Mashaw, Jerry L. (1985), 'Prodelegation: Why Administrators Should Make Political Decisions', **1** *Journal of Law, Economics, and Organization*, 81-100.

McCubbins, Mathew D. and Page, Talbot (1986), 'The Congressional Foundations of Agency Performance', **51** *Public Choice*, 173-190.

McCubbins, Mathew D. and Page, Talbot (1987), 'A Theory of Congressional Delegation', in McCubbins, Mathew D. and Sullivan, Terry (eds), *Congress: Structure and Policy*, Cambridge, Cambridge University Press.

McCubbins, Mathew D. and Schwartz, T. (1984), 'Congressional Oversight Overlooked: Policy Patrols vs. Fire Alarms', **28** *American Journal of Political Science*, 165-179.

McCubbins, Mathew D., Noll, Roger G. and Weingast, Barry R. (1987), 'Administrative Procedures as Instruments of Political Control', **3** *Journal of Law, Economics and Organization*, 243-277.

McCubbins, Mathew D., Noll, Roger G. and Weingast, Barry R. (1989), 'Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies', **75** *Virginia Law Review*, 431-482.

McGarity, Thomas O. (1991), *Reinventing Rationality - The Role of Regulatory Analysis in the Federal Bureaucracy*, Cambridge, Cambridge University Press.

Migué, Jean-Luc and Belanger, Gerard (1974), 'Towards a General Theory of Managerial Discretion', **17** *Public Choice*, 27-43.

Miller, James C., III (1989), *The Economist as Reformer: Revamping the FTC, 1981*, Washington, American Enterprise Institute for Public Policy Research, 110 p.

Mitnick, Barry M. (1975), 'The Theory of Agency: The Political Paradox and Regulatory Behaviour', **24** *Public Choice*, 27-47.

Mitnick, Barry M. (1980), *Political-Economy of Regulation*, New York, Columbia University Press.

Moe, Terry M. (1985), 'Control and Feedback in Economic Regulation: The Case of the NLRB', **79** *American Political Science Review*, 1094-1117.

Moe, Terry M. (1987), 'An Assessment of the Positive Theory of Congressional Dominance', **12** *Legislative Studies Quarterly*, 475-520.

Moe, Terry M. (1989), 'The Politics of Bureaucratic Structure', in Chubb, John and Peterson, Paul (eds), *Can the Government Govern?*, Washington, Brookings Institution.

Muris, Timothy J. (1986), 'Regulatory Policymaking at the Federal Trade Commission: The Extent of Congressional Control', **94** *Journal of Political Economy*, 884-889.

Nichols, Albert L. (1982), 'Legislative Choice of Regulatory Forms. A Comment on Fiorina', **39** *Public Choice*, 67-71.

Niskanen, William A. (1971), *Bureaucracy and Representive Government*, Chicago, Aldine-Atherton.

Niskanen, William A. (1975), 'Bureaucracts and Politicians', **18** *Journal of Law and Economics*, 617-643.
Noll, R. (1971), *Reforming Regulation: An Evaluation of the Ash Council Proposals*, Washington, Brookings Institution.
Ogul, Morris S. and Rockmann, Bert A. (1990), 'Overseeing Oversight: New Departures and an Old Problem', **15** *Legislative Studies Quarterly*, 5-24.
Ogus, Anthony I. (1995), 'Economics and Law Reform: Thirty years of Law Commission Endeavor', **11** *Law Quarterly Review*, 407-420.
Olson, Mary (1995), 'Regulatory Agency Discretion among Competing Industries: Inside the FDA', **11** *Journal of Law, Economics, and Organization*, 379-408.
Olson, Mary (1996), 'Substitution in Regulatory Agencies: FDA Enforcement Alternatives', **12** *Journal of Law, Economics, and Organization*, 376-407.
Page, William H. (1981), 'Antitrust, Federalism, and the Regulatory Process: A Reconstruction and Critique of the State Action Exemption After Midcal Aluminium', **61** *Boston University Law Review*, 1099-1138.
Parisi, Francesco (1995), 'Public Choice Theory and International Institutions: One More Comment on Richard Falk', **1** *International Legal Theory*, 45-48.
Parisi, Francesco (1997), *The Market of Votes: Coasian Bargaining in an Arrovian Setting*, George Mason University Law and Economics Working Paper Series, No. 97-05.
Parisi, Francesco (1998a), *A Property-Right Theory of Democratic Voting*, George Mason University Law and Economics Working Paper Series, #98-04.
Parisi, Francesco (1998b), 'The Market for Votes: Coasian Bargaining in an Arrovian Setting', **6** *George Mason Law Review*, 745-766.
Posner, Richard A. (1972), 'The Behavior of Administrative Agencies', **1** *Journal of Legal Studies*, 305-347.
Provopoulos, George and Zambaras, Athanassios (1991), 'Testing for Causality Between Government Spending and Taxation', **68** *Public Choice*, 277-282.
Rasmussen, David W. and Benson, Bruce L. (eds) (1994), *The Economic Anatomy of a Drug War: Criminal Justice in the Commons*, Lanham, MD, Rowman and Littlefield..
Ribstein, Larry E. and Kobayashi, Bruce H. (1996a), 'An Economic Analysis of Uniform State Laws', **25** *Journal of Legal Studies*, 131-199.
Ribstein, Larry E. and Kobayashi, Bruce H. (1996b), 'Uniform Laws, Model Laws and Limited Liability Companies', **66** *University of Colorado Law Review*, 947-999.
Robinson, Glen O. (1989), 'Commentary: Political Uses of Structure and Process', **75** *Virginia Law Review*, 483-498.
Rose, Jonathan (1985), 'Executive Oversight of Rulemaking in Arizona: The Govenor's Regulatory Review Counsel - the First Three Years', *Arizona State Law Journal*, 425-491.
Rose, Jonathan (1985), 'Nonlawyer Practice before Federal Administrative Agencies Should be Encouraged', **37** *Administrative Law Review*, 363-373.
Rose-Ackerman, Susan (1978), *Corruption*, New York, Academic Press.
Rose-Ackerman, Susan (1979), *Political Corruption*, New York, Academic Press.
Rose-Ackerman, Susan (1990), 'Comment (on Ferejohn and Shipan's "Congressional Influence (on Bureaucracy)"', **6(S)** *Journal of Law, Economics, and Organization*, 21-27.

Rose-Ackerman, Susan (1995), *Controlling Environmental Policy*, New Haven and London, Yale University Press.

Ross, Stephen F. (1992), 'Delegation, Commitment, and the Regulatory Mandate: Comment', **8** *Journal of Law, Economics, and Organization*, 155-158.

Rubin, Paul H. and Cohen, Mark A. (1985), 'Private Enforcement of Public Policy', **3(1)** *Yale Journal on Regulation*, 167-193.

Rugge, Dale R. (1987), 'Judicial Review of Environmental Protection Agency Rule Promulgation - Clean Air Act State Implementation Plan Requirement', **27** *Natural Resources Journal*, 723-737.

Shepsle, Kenneth A. (1992), 'Organizational Design and Political Control of Administrative Agencies: A Comment: Bureaucratic Drift, Coalition Drift, and Time Consistency', **8** *Journal of Law, Economics, and Organization*, 111-118.

Simon, Herbert A., Smith, D.W. and Thompson, Victor A. (1950/1991), *Public Administration*, (2nd edn), New York, Alfred A. Knopf.

Smith, Janet Kiholm (1982a), 'Production of Licensing Legislation: An Economic Analysis of Interstate Differences', **11** *Journal of Legal Studies*, 117-137.

Smith, Janet Kiholm (1982b), 'An Analysis of State Regulations Governing Liquor Store Licensees', **25** *Journal of Law and Economics*, 301-320.

Spiller, Pablo T. and Tiller, Emerson H. (1997), 'Decision Costs and the Strategic Design of Administrative Process and Judicial Review', **16** *Journal of Legal Studies*, 347-370.

Spitzer, Matthew L. (1988), 'Antitrust Federalism and Rational Choice Political Economy: A Critique of Capture Theory', **61** *Southern California Law Review*, 1293-1326.

Spitzer, Matthew L. (1990), 'Extensions of Ferejohn and Shipan's Model of Administrative Agency Behavior', **6(S)** *Journal of Law, Economics, and Organization*, 29-43.

Spulber, Daniel F. and Besanko, David A. (1992), 'Delegation, Commitment, and the Regulatory Mandate', **8** *Journal of Law, Economics, and Organization*, 126-154.

Stalon, Charles G. (1986), 'Analysis and Synthesis in Quasi-Judicial Multimember Regulatory Agencies', in Saltzman, Sidney and Schuler, Richard E. (eds), *The Future of Electrical Energy: A Regional Perspective*, New York, Greenwood Press, 330-339.

Steunenberg, Bernard (1992), 'Congress, Bureaucracy, and Regulatory Policy Making', **8** *Journal of Law, Economics, and Organization*, 673-694.

Van Damme, E.E.C. (1996), 'Marktwerking en Herregulering (Markets and Re-regulation)', in Gestel, R.A.J. van et al. (eds), *Markt en Wet*, Deventer, W.E.J. Tjeenk Willink, 19-43.

Vaubel, Roland (1991), 'A Public Choice View of International Organizations', in Vaubel, Roland and Willet, Thomas D. (eds), *The Political Economy of International Organizations*, Boulder, CO, Westview Press, 27-45.

Waline, M. (1965), 'Quelques Facteurs Sociologiques de l'Evolution Actuelle du Droit (Some Sociologic Factors of Actual Evolution of Law)', in X (ed.), *Mélanges Offerts à René Savatier*.

Weingast, Barry R. (1981), 'Regulation, Reregulation, and Deregulation: The Political Foundations of Agency Clientele Relationships', **44** *Law and Contemporary Problems*, 147-177.

Weingast, Barry R. (1984), 'The Congressional-Bureaucratic System: A Principal Agent Perspective (With Applications to the SEC)', **44** *Public Choice*, 147-191.
Weingast, Barry R. and Moran, Mark J. (1983), 'Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission', **91** *Journal of Political Economy*, 765-800. Reprinted in Mackay, Robert J., Miller, James C., III and Yandle, Bruce (eds) (1987), *Public Choice and Regulation: A View form Inside the Federal Trade Commission*, Stanford, Hoover Institution Press, 30-62.
Weingast, Barry R. and Moran, Mark J. (1986), 'Congress and Regulatory Agency Choice: Reply', **94** *Journal of Political Economy*, 890-894.
Wiley, John Shepard, Jr (1986), 'A Capture Theory of Antitrust Federalism', **99** *Harvard Law Review*, 713-789.
Wiley, John Shepard, Jr (1988), 'A Capture Theory of Antitrust Federalism: Reply to Professors Page and Spitzer', **61** *Southern California Law Review*, 1327-1341.

Other References

Rubin, Paul H. (1977), 'Why is the Common Law Efficient', **6** *Journal of Legal Studies*, 51-63.
Priest, George L (1977), 'The Common Law Process and the Selection of Efficient Rules', **6** *Journal of Legal Studies*, 65-82.