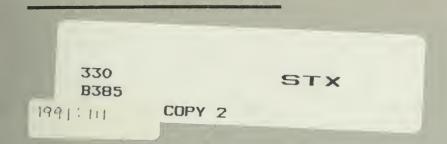




# Faculty Working Paper 91-0111 Political Economy Series #45



## Agency Discretion Under Judicial Review

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Agency Discretion under Judicial Review

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#### I. Introduction

Recent research on the design of regulatory institutions places substantial emphasis on the role of the Courts as supporting the interests of the enacting coalition (McCubbins, Noll and Weingast (1987), (1989)). There has been, however, very little analytical work on the role of the judicial system in constraining agency discretion, when the judiciary is modeled as a self-interested ideologically motivated institution. Gely and Spiller (1990a), for example, have suggested that such a role will not follow if the Courts are modeled as self interested, ideologically motivated institutions, making decisions subject not to the traditional legal rules of precedent, but to the constraints imposed by the other institutions of government (e.g. Congress, the President). In their basic framework there is no discretion left to the agency, as the Supreme Court will reverse any administrative decision that does not maximize the Court's own preferences, subject to not being reversed by Congress. Not only judicial review eliminates agency discretion, but in their framework it also eliminates the power of the status quo. In particular, committees cannot rely on judicial review of regulatory actions to block agency decisions when they follow adverse changes in the composition of Congress.

The basic SC framework has two major assumptions behind their result on agency discretion: first, SG assume that in interpreting legislative statutes the Court is free to choose any point in the policy space. Second, SG assume that making decisions is costless to the Court. In their framework, then, the equilibrium consists of a policy outcome such that it maximizes the Court's utility and is in the core of the bargaining game between the House, the Senate and the President. Thus, the location in the policy space of the

<sup>&</sup>lt;sup>1</sup> See, in particular, Gely and Spiller (1990a) and Ferejohn and Shipan (1990).

<sup>&</sup>lt;sup>2</sup> See, however, Gely and Spiller (1990a, section 2.6) where they start the analysis of a discrete model of judicial decision making. Ferejohn and Shipan (1990) develop a similar model for a single-chamber legislature.

administrative agency is irrelevant, as is the nature of the initial enacting legislation.

Confronted with a case concerning a particular set of issues, the Court's choice is only a function of its current preferences, and of the current political composition of Congress and the executive.

In this paper we explore the implications for agency discretion of relaxing those two assumptions.<sup>3</sup> We first present some of our previous results concerning agency discretion when the Supreme Court has only the power to reverse or sustain a prior agency decision.

The Court, though, in making its decision behaves strategically, considering its impact on the legislative process and on the subsequent policy outcome. We then generalize this model by introducing a collective Supreme Court, decision costs and finally, a multi-layer judicial system. For each of these cases we explore their implications for agency discretion.

The main results of this paper are as follows: First, while both agency preferences and the location of the initial status-quo are important in determining the equilibrium, the preferences of the Courts at the different levels and the magnitude of decision costs are crucial in determining the extent of agency discretion. Decision costs play two roles. On the one hand, decision costs expand the degree of discretion of the agency. On the other hand, stochastic decision costs are, in this framework, a sufficient condition to generate reversals of agency decisions. In the absence of stochastic decision costs, agency decisions turn out, in equilibrium, to always be the final and unchallenged outcome. This result clearly violates reality as important regulatory decisions by the Courts have involved the reversal of previous administrative agency decisions. Second, while judicial review restricts the extent of agency discretion, it does not eliminate it. Multiple appeal levels, however, further reduce the extent of agency discretion. In particular, the more opposed

<sup>&</sup>lt;sup>3</sup> Here we deal with statutory interpretation. For an analysis of the Supreme Court constitutional decisions, see Gely and Spiller (1990b).

<sup>&</sup>lt;sup>4</sup> See Spiller (1990a) for an analysis of the role of the Court of Appeals in the regulation of long distance telecommunications.

the justices' preferences at the different levels of the judiciary, the more constrained the agency is to follow the initial legislative mandate. Finally, changes in the composition of Congress may translate into changes in the optimal agency decision, even under judicial review. Thus, judicial review does not necessarily safeguard the interests of the enacting coalition.

## II. A Simple Model of Agency Discretion

We start this section by analyzing a simple model of agency discretion in a bicameral legislature, one dimensional policy space framework, without Presidential veto power.<sup>5,6</sup> In the next sections we consider multidimensional policy spaces, collective choice inside the Court, judicial decision costs and a multi-layer judicial system.

## Basic Assumptions

To simplify the analysis several assumptions about committee control are made.

First, we will assume that the issues in question are handled by a particular committee in each house of Congress, with the committees having not only gate-keeping powers, but veto powers as well. Thus, we will assume that they control the voting outcome in their respective houses. We follow standard assumptions about spatial preferences, by assuming

<sup>&</sup>lt;sup>5</sup> The assumption about the lack of veto power is just to simplify the exposition. In a one dimensional issue space, Presidential veto does no qualitatively change the analysis. It only changes the set of feasible legislative outcomes, as now to reverse either an administrative agency or judicial decision, Congress needs Presidential consent. As will become clear below, though, even in the absence of veto power, the President is influential through the control of the administrative agencies.

<sup>&</sup>lt;sup>6</sup> This simple model is derived from Gelly and Spiller (1990a, Section 2.6). Interested readers are referred to that article.

<sup>&</sup>lt;sup>7</sup> The modern theory of Congressional institutions (e.g. Weingast and Marshall (1988), Shepsle and Weingast (1987, 1989)) suggests that committees have substantial power over the issues under their jurisdiction. In particular, because of their gate-keeping and veto power (i.e. they may block legislation from being introduced, as well as kill or modify legislation in conference), committee members' preferences may dominate issue specific legislation.

legislators to have well specified, single peaked, preference functions over the line representing the policy issue. Let H and S in Figure 1 represent the ideal points of the relevant committees of the House and the Senate respectively.

We assume, further, that the Court's preferences are also well specified and single peaked over the policy space. The source of the Court's preferences, however, are different from those of the legislators. While legislators "vote their district," Supreme Court justices are not subject to reelection. We assume, then, that the Court's preferences are essentially ideologically based. Let the Court's ideal point be represented by SC in Figure 1. We assume, furthermore, that the agency has well specified, single peaked, preferences over the policy space, with different agency's ideal points represented by points A<sub>i</sub> in Figure 1. The policy space is a single peaked, preferences are some space, with different agency's ideal points represented by points A<sub>i</sub> in Figure 1. The policy space is a single peaked, preferences are specified in the policy space, with different agency's ideal points represented by points A<sub>i</sub> in Figure 1. The policy space is a single peaked, preferences are specified in the policy space, with different agency's ideal points represented by points A<sub>i</sub> in Figure 1.

We assume a sequential game composed of four stages as follows. In the initial stage a certain legislation is passed that determines the initial status quo (represented by  $x_0$  in Figure 1). In the second stage the agency moves by implementing the statute and choosing a point (represented by  $x_0$ ). In the third stage the Court reviews the agency's decision. The

Seen in this light, these assumptions may not drastically violate reality. See, however, Gilligan and Krehbiel (1988) for a different view of committees composition.

<sup>&</sup>lt;sup>8</sup> In general, this assumption is equivalent to assume that the Court is composed of a single individual. In a single dimensional issue, however, this is an innocuous assumption as the median justice would be the relevant one. Below we show that under some conditions, that is not a restrictive assumption, as similar results can be obtained with a collective Court.

While the justices' monetary well-being may be unrelated to the issue in question, it is nevertheless reasonable to assume that they may have strong views about the substance of the case. Furthermore, political considerations form part of the appointment process, making it important to consider the political preferences of the justices. Thus, it is reasonable to assume that Supreme Court justices have stable preferences over the policy space. See Gely and Spiller (1990a) for a more detailed discussion of the rationale for this preference assumption.

<sup>&</sup>lt;sup>10</sup> The preferences of the administrative agency may reflect, to some extent, the preferences of the President, as the President appoints the agency head, or the commissioners, and their terms are relatively short. Observe, however, that those appointments usually require Senate consent.

Court can either reverse or sustain the agency decision. If the Court reverses the agency decision, it upholds the initial status-quo,  $x_0$ . If the Court sustains the agency decision, then the new status quo becomes  $x_a$ . In the fourth stage, Congress considers the Court's decision. The Court's decision, then, determines the relevant status quo at the fourth stage. If the two houses of Congress can find a policy outcome that improves upon the decision of the Supreme Court, then that policy becomes the final outcome, and it is the equilibrium to the game. If Congress cannot find a policy that is preferred by both houses to the decision of the Court, then the latter becomes the equilibrium. We assume that congressional bargaining is efficient and individually rational. Efficiency implies that the outcome of the bargaining has to be such that no other outcome could make both houses of Congress better off. Individual rationality means that bargaining cannot make any house of Congress worse off than the initial status quo. Thus, all outcomes to the congressional bargaining game have to be inside the contract set represented in Figure 1 by the segment [H,S]. Call it C(H,S).

Finally, we assume that at each stage each player behaves rationally, and solves the game ahead. Thus, subgame perfection is assumed throughout.

## Solving the Game

We solve the model backwards, by analyzing first the optimal action of Congress given a previous decision by the Court. Consider a decision of the Court. Since the Court can either uphold the agency decision,  $x_a$ , or reverse it and thus uphold the status quo,  $x_0$ , we can describe the decision of the court as a function  $Z(x_0, x_a)$ . This decision, then, becomes the status quo to the bargaining game inside Congress. Thus if  $Z(x_0, x_a) \in C(H, S)$ ,

Observe that in the absence of decision costs the Court always reviews the decisions of the administrative agency. Thus, the Court's decision may imply reversing or sustaining the administrative agency's decision. In the next section we consider decision costs. In that case, then, not granting certiorari implies letting the agency's decision stand.

then the Court's decision becomes the equilibrium, as by definition Congress cannot find an alternative policy that makes both better off. If  $Z(x_0,x_a) \notin C(H,S)$ , then bargaining between the House and the Senate will bring about an outcome inside C(H,S). Let G(x),  $G(x)\in C(H,S)$ , represent the equilibrium to a congressional bargaining game with x representing the initial status quo. Thus, if  $x\in C(H,S)$ , G(x)=x.

When the Court makes its decision it considers the optimal response of the legislature. We have to consider four cases. If both  $x_a$  and  $x_0 \notin C(H,S)$ , then the Court's decision will trigger congressional bargaining that will bring the outcome inside C(H,S). The Court will then pick between  $x_a$  and  $x_0$ , depending on which outcome provides the Court with a higher utility, that is whether  $U^{SC}(G(x_a)) \gtrsim U^{SC}(G(x_0))$ , where  $U^{SC}(.)$  represents the Supreme Court's utility function.

If  $x_a$  and  $x_0 \in C(H,S)$ , then the Court decision becomes the equilibrium, and it chooses, again, between  $x_a$  or  $x_0$  depending on which outcome provides the Court with a higher utility. If, however,  $x_a \in C(H,S)$ , but  $x_0 \notin C(H,S)$ , or  $x_a \notin C(H,S)$  but  $x_0 \in C(H,S)$ , the decision of the Court may actually trigger congressional bargaining which will bring the equilibrium inside C(H,S).

In general, then, the Court decides to reverse or not the agency's decision depending on whether  $U^{SC}(G(x_0)) \gtrsim U^{SC}(G(x_a))$ .

Given the optimal strategies of the Court and Congress, the agency will make its policy decision such that it will maximize its utility. The agency knows that would the Court reverse its decision, the legislative outcome will depend on whether  $x_0$  is in C(H,S) or not. If  $x_0$  is in C(H,S), then  $x_0=G(x_0)$  becomes the final outcome. If, however,  $x_0 \notin C(H,S)$ , then would the Court reverse  $x_a$ ,  $G(x_0)\neq x_0$ , becomes the equilibrium. Thus, in general, reversing the agency decision implies that  $G(x_0)$  becomes the final outcome.

Assume, first, that  $x_0 \in C(H,S)$ . Let SC(y) (A(y)) represent those points in the policy space that the Court (agency) prefers to the point y. If  $SC(x_0) \cap A(x_0) = \emptyset$ , then the agency

cannot make a policy decision other than  $x_0$ , as it would be reversed by the Court without triggering further legislative move. This will be the case if the ideal points of the agency and the Court are on different sides of  $x_0$ .

If, however,  $SC(x_0) \cap A(x_0) \neq \emptyset$ , then the agency will pick that point in  $SC(x_0) \cap C(H,S)$  such that maximizes its own utility. Thus, if  $A \in SC(x_0) \cap C(H,S)$ , then  $x_a = A$ , and it becomes the equilibrium. This is the extreme case of agency discretion, as marginal changes in A change the equilibrium policy outcome. If, however,  $A \notin SC(x_0) \cap C(H,S)$ , then  $x_a$  will be at the boundary of  $SC(x_0) \cap C(H,S)$  closer to A, with marginal changes in A not changing the equilibrium outcome.

Consider now the case where  $x_0 \notin C(H,S)$ . This could be the case following changes in the composition of congress, or of the relevant committee. In this case, if the agency's decision is reversed by the Court, then the equilibrium is  $G(x_0)$ . Thus, there are two cases to consider. If  $SC(G(x_0) \cap A(G(x_0) = \emptyset, \text{ then } G(x_0) \text{ becomes the equilibrium. In this case, the agency cannot make a decision that makes the Court and itself better off over the credible legislative move. Thus, it cannot do better than setting the administration's policy equal to the policy that would come out of congressional bargaining. If, however, <math>SC(G(x_0)) \cap A(G(x_0)) \neq \emptyset$ , then there are points in  $SC(G(x_0)) \cap C(H,S)$  that the agency will prefer to  $G(x_0)$ . In particular, if  $A \in SC(G(x_0)) \cap C(H,S)$  then the ideal point of the agency becomes the equilibrium. Alternative, the equilibrium is in the boundary of  $SC(G(x_0)) \cap C(H,S)$  closer to A.

Thus, we can state:

**Proposition 1:** Under the assumptions described in the text, the unique equilibrium to the game is that point in  $SC(G(x_0)) \cap C(H,S)$  such that maximizes the agency's utility.

Assuming subgame perfection, then, we obtain that the agency's decision always becomes the equilibrium to the game. This result does not imply that the agency actually has any discretion left. In particular, if the agency's and the Court's ideal points are on

different sides of the credible legislative threat  $(G(x_0))$ , then the credible legislative threat becomes the equilibrium. Agency discretion may exist, however, when both the agency's and the Court's ideal points are on the same side of the credible legislative threat.

Figure 1 presents a feasible configuration on a one-dimensional policy space. In Figure 1  $x_0$  is a candidate for equilibrium as it is inside C(H,S). The ideal point of the Supreme Court is represented by SC and it is located inside C(H,S). Hence, if the Court could make decisions as in SG, the equilibrium would be SC.

Consider first an agency location like  $A_1$ , to the right of  $x_0$ . Since  $x_0$  is a feasible equilibrium, the agency cannot do better but to set the equilibrium to  $x_0$ . Would the agency decide on a point to the right of  $x_0$ , even if it is inside C(H,S), it would be reversed by the Court as it prefers  $x_0$  to any point to its right.

Consider now an agency position to the left of SC and outside  $SC(x_0)$ , like  $A_3$ . An administrative policy represented by  $A_3$  is untenable. The Court would reverse  $A_3$  as it prefers  $x_0$  to  $A_3$ . Furthermore, if the Court upholds  $A_3$ , then it will be reversed by Congress. The agency, however, will be worse off under  $G(A_3)$  than under, say, H. Thus, the agency will not pick any point  $x_a < H$ . Furthermore, since H is the boundary of  $SC(x_0) \cap C(H,S)$  closest to  $A_3$ , H will become the equilibrium. As  $A_3$  moves to the right, the equilibrium remains H as long as  $A \le H$ . For  $H < A \le x_0$ , the equilibrium is  $A_3$ , and for  $A_3$ , the equilibrium is  $A_3$ .

Figure 2 provides a representation of the equilibrium. The vertical axis reflects the equilibrium to this game as A is increased from the far left to the far right.

Let us compare the equilibrium to this particular case with the equilibrium that would develop in the absence of judicial review. Since the status quo,  $x_0$ , is in C(H,S), any point in C(H,S) could be a feasible agency policy. The dotted lines represent the equilibrium to the game without judicial review. Thus, in this particular case, the Court constraints the agency to points in C(H,S) (weakly) to the left of  $x_0$ .

An interesting feature of this case, though, is that the preferences of the Supreme Court do not matter in the equilibrium. They would, however, if the ideal point of the Court was such that, for example,  $SC(x_0)\subset C(H,S)$ . In that case the left boundary of  $SC(x_0)$  becomes the equilibrium for values of A to the left of that point. Thus, marginal changes in the ideal point of the Court would imply marginal changes in the equilibrium policy outcome.

Finally, observe that judicial review does not assure policy stability. Would the composition of Congress change, so will, in general, the equilibrium outcome. For example, if following a change in Congress  $x_0$  is not in C(H,S), then  $G(x_0)$  becomes the relevant status quo, even without a Congressional action.  $G(x_0)$ , however, takes into account the new political balance in Congress.

Another main implication of this analysis is that in general a linear regression of policy decisions on characteristics of the Court, Congress and the Agency is plagued with misspecification problems, as the relationship between policy outcomes, preferences and the initial status quo is not only non-linear, but also discontinuous.

### III. Extensions

In this section we consider several extensions of the simple model just described. First, we extend the model to two dimensional issue space. We show that the results are essentially the same as those for the single dimension model. We then consider a collective Supreme Court, and analyze voting inside the Court. We show that under some conditions, the same qualitative results hold true, where the preferences of just a key (median) justice are what constrain the agency. We then explore the implications of decision costs and show their relevance to understand agency reversals. Finally, we explore the implications of a multi-layer judiciary and show how it further constraints administrative agencies' policy discretion.

## a. A Multidimensional Policy Space<sup>12</sup>

In this section we expand our preference assumptions and assume that each legislator, the Court and the agency have preferences that are characterized by strictly convex iso-utility contours in R<sup>2</sup>. As above, we call H the ideal point of the House, S the ideal point of the Senate, SC the ideal point of the Court and A the ideal point of the agency.

Unconstrained bargaining between the two houses of Congress would bring about an outcome in their contract curve, C(H,S). Observe that if Congressional preferences are represented by circular iso-utility contours, then C(H,S) will be a straight line. For simplicity, and to assure uniqueness of equilibria, we make such an assumption in this and the next section. Again, let G(x) represent the deterministic outcome to a bargaining process when x is the status quo.

The game has the same structure as before. It can be seen that again there are two cases, depending on whether  $x_0$  belongs or not to C(H,S).

If  $x_0 \in C(H,S)$ , then if  $A(x_0) \cap SC(x_0) \cap C(H,S) = \emptyset$ , then  $x_0$  is the equilibrium. If, however,  $A(x_0) \cap SC(x_0) \cap C(H,S) \neq \emptyset$ , then the equilibrium is given by that point in  $SC(x_0) \cap C(H,S)$  that maximizes the utility of the agency.

If, on the other hand,  $x_0 \notin C(H,S)$ , then  $x_0$  is not a credible legislative threat. Instead,  $G(x_0)$  is the credible legislative threat, and the following two cases are the relevant ones. If  $A(G(x_0)) \cap SC(G(x_0)) \cap C(H,S) = \emptyset$ , then  $G(x_0)$  is the equilibrium. If, instead  $A(G(x_0)) \cap SC(G(x_0)) \cap C(H,S) \neq \emptyset$ , then the equilibrium is given by the point in  $SC(G(x_0)) \cap C(H,S)$  such that it maximizes the utility of the agency.

Thus, in general, and as in the previous section, the equilibrium is given by that point in  $SC(G(x_0))\cap C(H,S)$  that maximizes the agency's utility. Thus we can state,

<sup>&</sup>lt;sup>12</sup> For a more detailed discussion of this case, see Gely and Spiller (1990a).

**Proposition 2:** Under the assumptions discussed above, Proposition 1 holds also for a two-dimensional issue space.

Figure 3 presents a case where  $x_0 \notin C(H,S)$ . We observe that the fact that the Court can reverse the agency's decision, and thus trigger congressional action towards  $G(x_0)$ , restricts the set of feasible agency decisions. Thus, the results of the previous sections are not too sensitive to the dimensionality of the policy space.

## b. Voting in the Court.

So far we have assumed that the Court can be represented as a single individual. This is a proper assumption in a one dimensional issue, where the median voter theorem would apply to the Court as well. Consider, instead an issue in R<sup>2</sup>. Let the court be composed of three justices, with ideal points represented as J<sub>i</sub>, i=1,3. For simplicity assume that the President cannot sustain a veto. Thus, all feasible congressional outcomes have to be in C(H,S). Spiller and Gely (1990) analyze voting in the Court, when the Court can actually pick any point in the policy space. There it is shown, that in such a case, given the current assumptions about congressional preferences, there is a unique equilibrium given by the median justice's projection of its ideal point onto C(H,S). The main thrust of that paper is that as long as only proposals that would not be reversed by Congress are accepted in the justices' voting game, cycling is eliminated, and a unique majority rule equilibrium exists.

Here, however, justices cannot pick their most preferred policy, but rather their voting is on whether or not to reverse the agency's decision. To solve this game we assume, as before, that all justices know the outcome of the subsequent stage when Congress bargains for an alternative policy from that of the Court.

Let now WSC(x) represent the winning set of x in the Court. That is, WSC(x) are all those points in  $\mathbb{R}^2$  that a majority of the justices prefer to x. See Figure 4. Again, as in previous sections, if  $A(G(x_0)) \cap WSC(G(x_0)) \cap C(H,S) = \emptyset$ , then  $G(x_0)$  is the equilibrium, as the

agency cannot find an alternative policy to  $G(x_0)$  that makes it better off without being reversed (with  $G(x_0)$  being again the outcome). If, however,  $A(G(x_0)) \cap WSC(G(x_0)) \cap C(H,S) \neq \emptyset$ , then the equilibrium is that point in  $WSC(G(x_0)) \cap C(H,S)$  such that maximizes the agency's utility. Observe that in Figure 4  $x_0 = G(x_0)$  and  $WSC(x_0) \cap C(H,S) = SC^2(x_0) \cap C(H,S)$ , where  $SC^2(x_0)$  are all those policy points that justice  $J_2$  prefers to  $x_0$ . Thus, only marginal changes in the preferences of  $J_2$  and not in any of the other justices matter in determining the equilibrium.  $J_2$ , then, can be called the "median" justice. Thus, under our assumptions, collective choice inside the Court does not seem to increase the extent of agency discretion.<sup>13</sup>

We can then state,

**Proposition 3:** Under the Assumptions of Section III.a., the unique equilibrium is that point in  $WSC(G(x_0))\cap C(H,S)$  that maximizes the agency's utility. Furthermore, even though there are multiple justices, only marginal changes in the preferences of a key justice impact upon the set  $WSC(G(x_0))\cap C(H,S)$ , and hence limits agency discretion.

#### c. Decision Costs at the Court

In this section we extend the previous model to consider decision costs at the Court. The Supreme Court among all Courts in the US judiciary is the only one that can actually decide which cases to consider. There has been substantial political and legal research trying to understand the *Certiorari* decision and how it relates to the final decisions on the cases themselves.<sup>14</sup> This literature, however, has focused almost exclusively on justices'

See Spiller and Gely (1990) for a more detailed analysis of collective choice inside the Court when the Court is unconstrained in its policy choice. Note also, that would the President have veto power, then feasible legislative outcomes consists of all those points in the core of the bargaining game among the House, the Senate and the President. Call it C(H,S,P). The agency can choose points in  $WSC(G(x_0))\cap C(H,S,P)$ , which will usually consist of an area in  $R^2$  rather than a line. Marginal changes in any of the justices, however, will usually imply a change in that set.

<sup>&</sup>lt;sup>14</sup> See Schubert (1959) for one of the first quantitative studies of the *Certiorari* process. For more recent empirical analyses see Brenner and Krol (1989), Palmer (1982), Songer (1979), Teger

voting strategies without considering further the interaction between the Supreme Court and the other institutions of government.<sup>15</sup> In this section we develop the implications that the *Certiorari* process has for discretion at the agency level when the Court is constrained in its decision set to either reverse or sustain the agency's decision.<sup>16</sup>

To simplify the analysis we again deal with a single-dimensional issue. All our other assumptions are as in section I. We assume here that considering and making a decision on a case implies a cost equal to T. To simplify the analysis we first assume that T is deterministic. Below we relax this assumption and explore the implications of stochastic decision costs. Thus, if the Court makes a decision in the real line such that the outcome is E, and E is valued by the Supreme Court as  $U^{SC}(E)$ , then the net gain from making the decision E is  $U^{SC}(E)$ -T.

The main effect of introducing the decision costs T is that it expands the set of policies that the Court prefers to say  $G(x_0)$ . Consider the case as in Figure 5, where for simplicity  $U^{SC}(x)=-|x-SC|$ . Now if the Court reverses an agency decision and the outcome becomes  $G(x_0)$ , its utility level becomes  $U^{SC}(G(x_0))$ -T. Thus, call \*M and M\* (\*M<M\*) those points such that solve  $U^{SC}(m)=U^{SC}(G(x_0))$ -T. An agency decision that falls in  $[*M,M*]\cap C(H,S)$  would then not be reversed by the Court. Observe that, by construction  $M^*>G(x_0)$ . Thus, even though the ideal point of the Supreme Court is to the left of  $G(x_0)$ , the Court will accept an agency decision to the right of  $G(x_0)$ .

There are then two cases to consider. If  $A \in [*M,M^*] \cap C(H,S)$ , then A becomes the equilibrium. If, instead,  $A \notin [*M,M^*] \cap C(H,S)$ , then the equilibrium becomes the boundary of

and Kosinski (1980), and Ulmer (1984).

<sup>&</sup>lt;sup>15</sup> See, however, Caldeira and Wright (1988), who consider the role of organized interest groups in the *Certiorari* process.

<sup>&</sup>lt;sup>16</sup> See Spiller (1991) for an analysis of the implications of the *Certiorari* process for the extent of discretion of lower courts when the Supreme Court is unconstrained in its decision making ability.

 $[*M,M*] \cap C(H,S)$  closest to A. Thus, we can state:

**Proposition 4:** The unique equilibrium to the game with decision costs is that point in  $SC(M^*)\cap C(H,S)$ , such that maximizes the agency's utility, where  $M^*=\{m/U^{SC}(m)=U^{SC}(G(x_0))-T, M^*>G(x_0)\}.$ 

The introduction of decision costs then does not change qualitatively the main results of the previous sections. Agency discretion, however, is increased, with the extent of agency discretion depending now on the level of decision costs as well as on the shape of the Supreme Court' utility function. Still, perfect information and subgame perfection rules out reversals by the Court. The agency, foreseeing the evolution of the game will make a decision such that it becomes the equilibrium. That is, in the current framework, the Court will never grant Cert. To obtain reversals, though, some randomness is required.

### Stochastic Decision Costs

In this section we expand the model to allow for stochastic decision costs. In the previous sections we showed that with perfect information and exogenously given decision costs, the Supreme Court, in equilibrium, will not grant Cert to any case, as the agency will strategically chose its decisions from the no-Cert set. When decision costs are unknown to the agency, then Certiorari will be granted in those cases when decision costs are lower than expected. The agency, however, will take the distribution of decision costs into account in making its decision.

To show the workings of the model in this case, assume that the ideal point of the agency is to the right of the congressional contract set, i.e.,  $x_a>S$ . Observe that if the Court grants Cert and reverses the agency decision, the outcome becomes  $G(x_0)$ . It is trivial to see that the Court will not grant Cert so as to sustain the agency decision. Assume, now

If  $x_a \in C(H,S)$ , then, if *Cert* is granted and  $x_a$  is sustained,  $x_a$  becomes the equilibrium as Congress cannot find an alternative that is preferred by both houses to  $x_a$ . If  $x_a \notin C(H,S)$ , then sustaining  $x_a$  will imply that Congress will reverse it and set  $G(x_a)$  as the policy. But such

that the preferences of the agency are given by  $U^A(x/A) = -|x-A|$ , and those of the Supreme Court by  $U^{SC}(x/SC) = -|x-SC|$ . Let furthermore T be given by  $T = T^* + \nu$ , with  $F(\nu)$  ( $f(\nu)$ ) being  $\nu$ 's cumulative distribution (density) function. From the assumptions about Supreme Court preferences, the upper limit to the no-Cert region is given by  $M^* = G(x_0) + T^* + \nu$  for values of  $\nu$  such that  $G(x_0) + T^* + \nu \le S$ , where it is assumed as in the previous Figures that S > H. For those values of  $\nu$  such that  $G(x_0) + T^* + \nu > S$ , the upper limit to the no-Cert regions is S.

As discussed above, subgame perfection rules out agency decisions outside the contract set C(H,S). We can then concentrate on  $x_a \in C(H,S)$ . Thus, if  $x_a > M^*$  then the final outcome is  $G(x_0)$ , and the utility of the agency is given by  $-(A-G(x_0))$ . If, however,  $x_a \in [*M,M^*] \cap C(H,S)$ , then the agency's decision becomes the final outcome, and the utility level of the agency is given by  $-(A-x_a)$ . The agency's tradeoff is as follows: It can make a decision relatively close to its ideal point but have a relatively high probability of being reversed (and hence of sustaining an outcome much distant from its ideal point), or it can choose a decision that, while being further away from its ideal point, has a higher probability of not being reversed. It is straightforward to see, then, that the expected utility of the agency from a decision  $x_a$ ,  $x_a > G(x_0)$ , is given by  $x_a - A - (x_a - G(x_0))F(x_a - G(x_0) - T^*)$ , where the assumption that  $A > G(x_0)$  is used to rule out  $x_a < G(x_0)$  cases.

Maximization of the expected utility of the agency implies that the optimal decision  $x_a$  is given by

a policy could be achieved even if the Court did not take the case.

Observe that the distributional assumption may violate the fact that T>0. The distribution of  $\nu$  should actually be truncated with a lower bound k>-T\*.

$$G(x_0) + \frac{1 - F(x_a^* - G(x_0) - T^*)}{f(x_a^* - G(x_0) - T^*)} \quad if \quad G(x_0) + \frac{1 - F(x_a^* - G(x_0) - T^*)}{f(x_a^* - G(x_0) - T^*)} \le S$$

$$S \quad if \quad G(x_0) + \frac{1 - F(x_a^* - G(x_0) - T^*)}{f(x_a^* - G(x_0) - T^*)} > S.$$

The term F(x)/f(x) is the hazard ratio which is usually assumed to be non-decreasing in x.<sup>19</sup> Thus, under that assumption we obtain that the optimal value of x<sub>a</sub> is nondecreasing in  $T^*$  and  $G(x_0)$ . That is, increases in the initial status quo would (weakly) increase the optimal decision at the agency level, as will increases in Supreme Court decision costs. Similar analysis can be used to derive the equilibria for the other cases. In this case, though, marginal changes in the ideal point of the Supreme Court do not affect the agency's optimal decision. It can be seen, though, that if H<A<SC, then increases in SC will increase the optimal  $x_a$ . To see this, observe that the optimal  $x_a$  must be less than SC. Thus, the probability of Cert is given by the probability that  $x_a < SC-(G(x_0)+T^*+\nu-SC)$ which is given by  $F(2SC-G(x_0)-T^*-x_a)$ . In this case, then, increases in the ideal point of the Supreme Court increases the optimal agency decision. Increases in the expected value of decision costs, though, reduces x<sub>a</sub>. Finally, the effect of a change in the initial status quo on the optimal x<sub>a</sub> is uncertain. On the one hand, increases in the status quo, holding constant SC, reduces the probability of granting Cert for a given  $x_a$ <SC, thus reducing  $x_a$ . On the other hand, it increases the disutility from Cert as it moves the final outcome further away from A, thus increasing the optimal agency decision.

To summarize, stochastic judicial decision costs are crucial to obtain realistic models of agency discretion. The higher the average decision costs the higher the extent of agency discretion.

This property is satisfied by many distributions, like the normal, the uniform, the exponential and the logistic.

## d. A Multi-layer Judiciary

The previous models analyze the interaction between Congress, the Supreme Court and an administrative agency. In fact, though, there is an intermediate step before administrative cases go to the Supreme Court, namely an appeal to the Appeal Courts. In this section we analyze the role of Appeal Courts as further reviewers of administrative agencies. We show that, in the same way that the existence of the Supreme Court restricts agency discretion over and above what Congress could do, the existence of an intermediate judicial screening process further restricts the extent of agency discretion. Furthermore, the more opposed (in relation to the credible legislative outcome) the preferences of the justices at the different levels of the judicial hierarchy, the more the judiciary limits agency discretion.

We start by assuming, again, a single dimension policy space, and that the Appeal Courts has well specified, and single peaked preferences over the policy space. The source of Appeal Court preferences is similar to that of the Supreme Court, namely ideology. Call AC its ideal point. Apart from the fact that the Supreme Court decisions are reviewed by Congress while those of the Appeal Court by the Supreme Court, there is a basic difference between the Supreme Court and the Courts of Appeal. While the latter must review all cases that are appealed to it, that is not the case for the Supreme Court. Thus, the Appeal Court cannot save time or effort by not considering cases that it would like to uphold. The Supreme Court, on the other hand, can do it. Thus, for simplicity, we will assume that there are no relevant decision costs at the Appeal Court level.

The game, now, has five stages. In the first stage a certain legislation is passed that determines  $x_0$ . In the second stage an agency makes a decision which is reviewed by the Appeal Courts at stage three. At stage four, the decision of the Court of Appeals is brought

<sup>&</sup>lt;sup>20</sup> See the discussion in and surrounding footnote 9.

to the Supreme Court where it has to decide whether to grant Cert, and if so, to reverse it.

At stage five, Congress bargains over an alternative policy.

We solve this model by backward induction in the same way as the previous sections. We analyze first the optimal decision for the Supreme Court. The Supreme Court can only choose between two alternatives,  $x_a$  or  $G(x_0)$ . The decision at the appeal level, however, determines which strategy to follow. To see this, observe that Appeal Court decisions can be of two types. It can uphold the agency decision or reverse it. If it upholds the agency decision, then if the Supreme Court grants Cert it will only be to reverse the agency decision, such that  $G(x_0)$  becomes the final outcome. If the Supreme Court does not grant Cert, then  $G(x_a)$  becomes the equilibrium. Thus, given that the agency decision was upheld by the Appeals Court, the Supreme Court will grant Cert, and reverse the Appeal Courts only if  $U^{SC}(G(x_0))-T > U^{SC}(G(x_a))$ .

Thus, from the definition of the set [\*M,M\*], an agency decision that falls in [\*M,M\*]\cappaC(H,S) and that is upheld by the Appeal Court will not be granted Cert, and hence will constitute the equilibrium. On the other hand, the Supreme Court will grant\cdot Cert and reverse all decisions that are not in [\*M,M\*] that were upheld by the Court of Appeals. See Figure 6. Figure 6 presents a case where congressional preferences do not bind.

Consider, now, an agency decision that was reversed by the Appeals Court. If the Supreme Court does not grant Cert, then  $G(x_0)$  will become the equilibrium. If, however, the Supreme Court grants Cert, it will do so only to reverse the Appeals Court and restore  $G(x_a)$  as the final outcome. Thus, given that the Court of Appeals reversed the agency decision, the Supreme Court will grant Cert only if  $U^{SC}(G(x_a)) - T > U^{SC}(G(x_0))$ . That is, only if even after paying the decision costs T, the Supreme Court prefers the agency decision to the credible legislative outcome. Call \*N and N\*, \*N<N\*, the boundaries to this set. See Figure 6.

Finally, observe that if  $x_a$  is such that  $U^{SC}(G(x_0))-T < U^{SC}(G(x_a)) < U^{SC}(G(x_0))+T$ ,

then the Supreme Court will not grant Cert, independently of the Appeal Court's decision.

There are then basically three areas with different optimal Supreme Court strategies:

- a) grant Cert if the agency was reversed:  $U^{SC}(G(x_a)) T > U^{SC}(G(x_0))$ ;
- b) grant Cert if the agency was upheld:  $U^{SC}(G(x_0))-T > U^{SC}(G(x_a))$ ;
- c) do not grant Cert:  $U^{SC}(G(x_0))-T < U^{SC}(G(x_a)) < U^{SC}(G(x_0))+T$ .

The Appeals Court, then, when considering its optimal decision takes into account the optimal response of the Supreme Court to its own decision.

Consider, first, an agency decision such that  $U^{SC}(G(x_a)) - T > U^{SC}(G(x_0))$ . Would the Appeal Court try to reverse it, the Supreme Court will reverse it back. Thus, either way the equilibrium is  $G(x_a)$ . Thus, we assume that in this case the Court of Appeals follows the Supreme Court and upholds the agency decision. Consider now an agency decision such that  $U^{SC}(G(x_0))-T>U^{SC}(G(x_a))$ . Would the Appeal Court uphold it, the Supreme Court will reverse it and the final outcome will be  $G(x_0)$ . Thus, we assume that in this case the Court of Appeals again follows the Supreme Court and reverses the agency decision. Finally, consider an agency decision such that  $U^{SC}(G(x_0))-T< U^{SC}(G(x_a))< U^{SC}(G(x_0))+T$ . In this case, the Appeal Court decision will not be reviewed by the Supreme Court. Thus, the Appeal Court will uphold the agency decision only if  $U^{AC}(G(x_a))>U^{AC}(G(x_0))$ . Otherwise it will reverse it and the equilibrium will become  $G(x_0)$ .

Consider a final outcome that was achieved through reversing an agency decision (either by one of the Courts or by Congress). Since the agency could have achieved that outcome directly, we can rule out agency decisions outside C(H,S) as well as those that trigger reversals at either judicial level. Thus, the set of non-reversable agency decisions is given by

$$\begin{split} &\{U^{\text{SC}}(x_{\text{a}})\text{-T} > U^{\text{SC}}(G(x_{0}))\} \cup \{U^{\text{SC}}(G(x_{0}))\text{-T} < U^{\text{SC}}(x_{\text{a}})\} \\ &\cup \{\{U^{\text{SC}}(G(x_{0}))\text{-T} < U^{\text{SC}}(x_{\text{a}}) < U^{\text{SC}}(G(x_{0}))\text{+T}\} \cap \{U^{\text{AC}}(x_{\text{a}})\text{>}U^{\text{AC}}(G(x_{0}))\}\}, \end{split}$$

where by the previous discussion, we are assured that  $x_a \in C(H,S)$ . The first term involves

those policies that are safeguarded by the Supreme Court. The second term are those policies that are always blocked by the Supreme Court; and the third term are those policies that the Supreme Court will never grant Cert and that are preferred by the Appeal Court to  $G(x_a)$ . The agency, then, chooses the point in that set that maximizes its own utility.

Observe that since the set of non-reversable decisions is not compact, uniqueness of equilibria is not assured. For example, assume that AC<\*M. Then agency decisions in, for example, the segment [\*M,x<sub>0</sub>] constitute feasible equilibria. Assume, now that the ideal point of the agency is equidistant from  $x_0$  and \*N, such tat  $U^A(x_0)=U^A(*N)$ . Either  $x_0$  or \*N are non-reversable agency decisions, and thus each constitute an equilibrium.

Observe that while there are regions where the Supreme Court would grant Cert, in this framework the Supreme Court never finds it optimal to grant Cert, except for some knife-edge cases.

It can be seen that multiplicity of judicial reviews further restricts the extent of agency discretion. To see this, observe that if only the Supreme Court would review the agencies, then all points between [\*M,M\*] would be feasible agency decisions. With an intermediate layer of judicial review, parts of the No-Cert regions are not feasible agency decisions any more. Figure 7 compares the equilibria with and without the intermediate level of judicial review. Figure 7 depicts the equilibria for AC<\*M as the ideal point of the agency increases. Without the Appeal Court, the equilibria is equal to A for A $\in$ [\*M,M\*], and it is represented, in Figure 7, by the narrow line. The solid line represents the equilibria that would develop for AC<\*M. Observe that the main difference is that the region [N\*,M\*] is not feasible any more. Observe that would AC>M\*, then the only region that is out of bounds for the administrative agency is [\*M,x<sub>0</sub>]. Since  $x_0$ -\*M<M\*-N\*, the extent of agency discretion is relatively larger when the two courts are on the same side of the status quo.

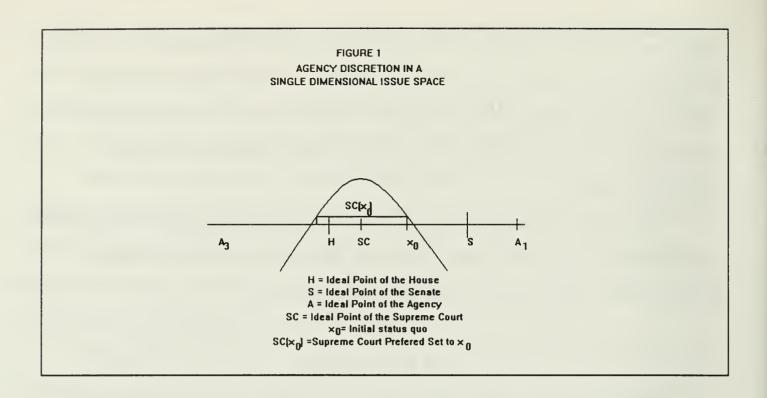
In general, then, holding constant the preferences of the Supreme Court, the extent of agency discretion increases as AC diverges from  $G(x_0)$ . It reaches its highest level when

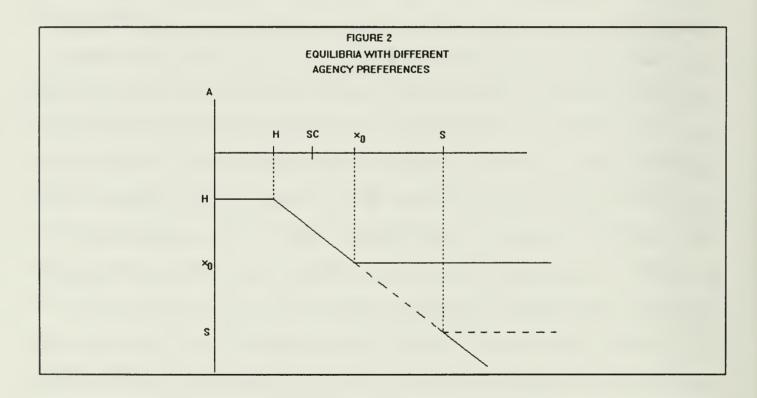
both SC and AC are to the same side of the credible congressional outcome,  $G(x_0)$ . That is, agency discretion is largest when both courts would like to move policy in the same direction away from the status quo. When their desired direction of change is opposite, i.e., they are on different sides of  $G(x_0)$ , then, the maximum attainable level of agency discretion is smaller.

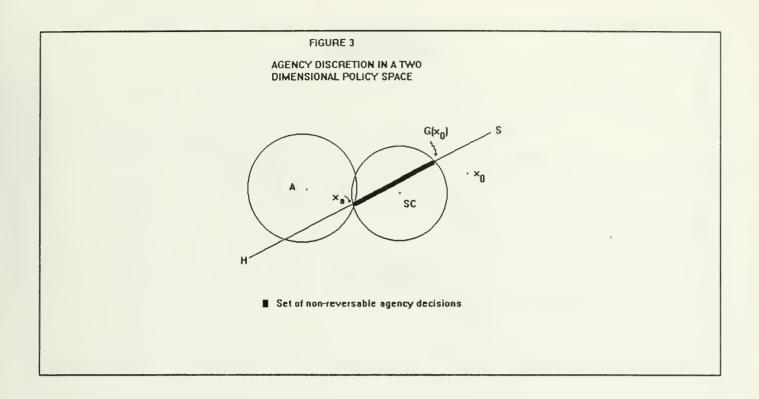
To summarize, the existence of several intermediate judicial layers has the effect of further reducing the extent of agency discretion. The extent of reduction depends, however, on the relative location of the two Court's ideal points.

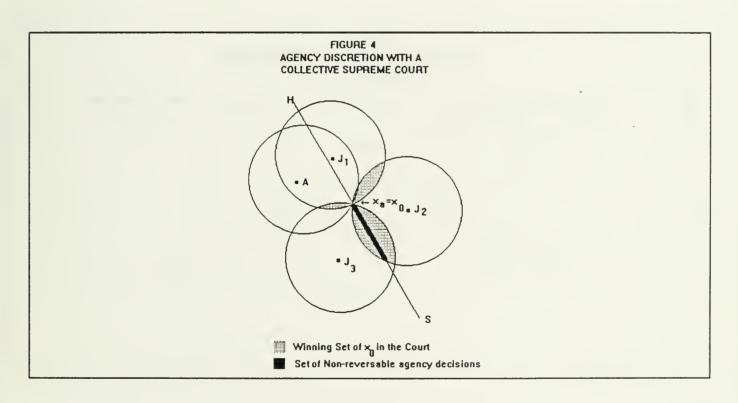
#### III. Final Comments

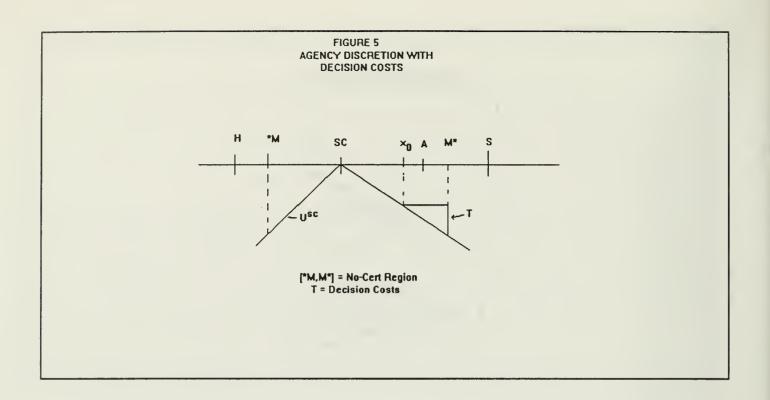
When the Court can only reverse or sustain an agency decision, the agency has substantial discretion. The Court will not support the status quo in all cases, as changes away from the status quo may make both the Court and the agency better off. The Court will sustain the status quo, however, when the agency's interests are in moving policy away from the direction most preferred by the Court. The main thrust of Spiller and Gely's framework remains here as, first, the Court will follow election results as they change the set of feasible legislative decisions. Second, the Court, while behaving strategically, is not able to impose its preferences, but rather is constrained by the remaining institutions of government. This paper also develops the role of decision costs in both increasing agency discretion as well as in generating judicial reversal of administrative agency policies. Finally, the paper shows the role of multiple layers of judicial review. Even though each of those layers may be composed of ideologically motivated justices, multiple levels of judicial review further restrict agency discretion.

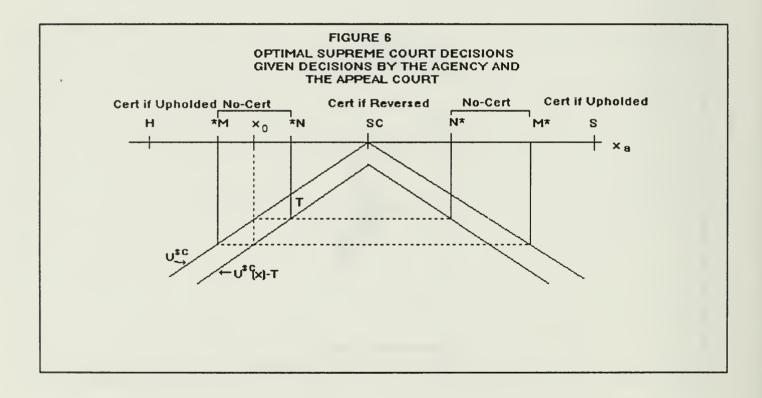


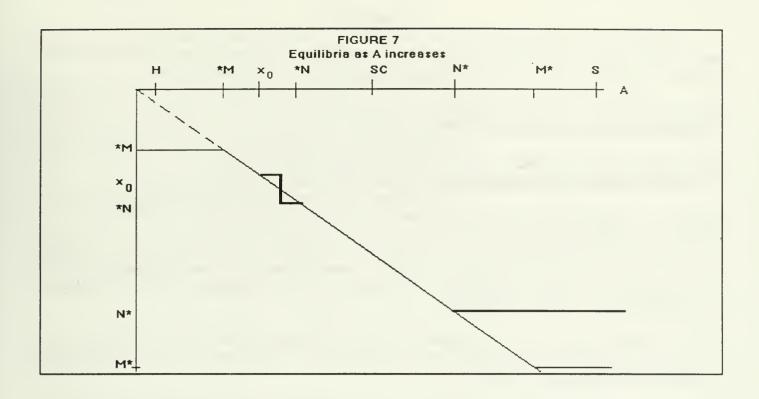












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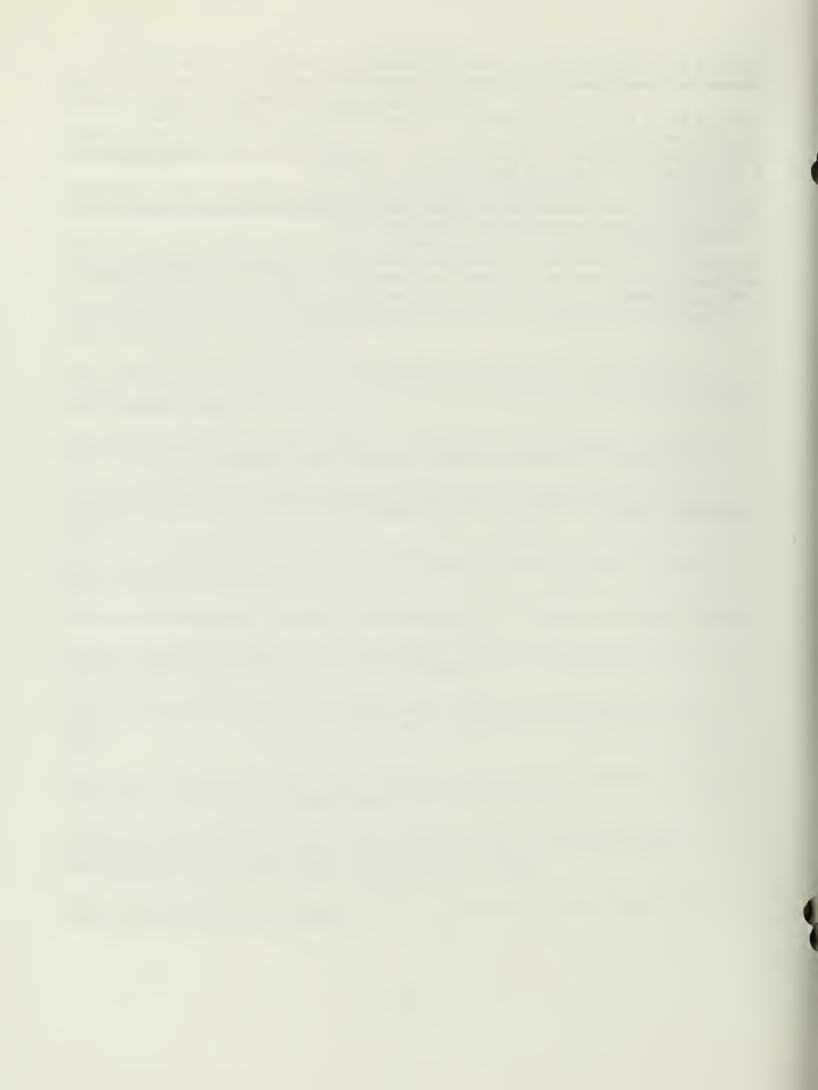
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