

The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court-Circuit Court Interactions Author(s): Donald R. Songer, Jeffrey A. Segal and Charles M. Cameron Source: American Journal of Political Science, Vol. 38, No. 3 (Aug., 1994), pp. 673-696 Published by: Midwest Political Science Association Stable URL: http://www.jstor.org/stable/2111602 Accessed: 17-10-2017 15:12 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://about.jstor.org/terms



Midwest Political Science Association is collaborating with JSTOR to digitize, preserve and extend access to *American Journal of Political Science*

The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court– Circuit Court Interactions*

Donald R. Songer, University of South Carolina Jeffrey A. Segal, State University of New York at Stony Brook Charles M. Cameron, Columbia University

We examine Supreme Court-circuit court interactions from a principal-agent perspective, employing a fact pattern analysis to determine the extent to which circuit courts follow their own policy preferences versus the extent that they follow the policy dictates of the Supreme Court. We then examine whether monitoring by the Supreme Court can affect those interactions. We find that the courts of appeals are highly responsive to the changing search and seizure policies of the Supreme Court. Nevertheless, the strong independent effect of the ideologies of the judges gives evidence that judges do find opportunities to "shirk" to satisfy their own policy interests. We also find strong evidence that litigants play an active role in influencing monitoring by the Supreme Court.

It is not pleasant to contemplate, but it appears to be true that at least some federal judges take their orders directly from the Supreme Court. —Congressman Otto Passman (quoted in Rosenberg 1991, 89)

Introduction

This paper examines the interactions between the U.S. Supreme Court and the U.S. Courts of Appeals. Our theoretical approach, which borrows from principal-agent theory, views the appeals courts acting as agents on behalf of their principal, the Supreme Court. Principal-agent theory explicitly questions the degree to which agents act on behest of their principals versus the extent to which they shirk (i.e., the extent to which they act on their own behalf), and the extent to which control mechanisms by the principal can minimize shirking. We explore the extent to which the appeals courts follow Supreme Court preferences versus the extent to which they follow their own policy preferences and the extent to which monitoring and control by the Supreme Court can

*We gratefully acknowledge the support of National Science Foundation grant SES-9112755. We thank Ashlyn Kuersten and David Slovensky for their research assistance. An earlier version of this paper was prepared for delivery at the 1992 annual meeting of the American Political Science Association, Chicago.

American Journal of Political Science, Vol. 38, No. 3, August 1994, Pp. 673–96 © 1994 by the University of Texas Press, P.O. Box 7819, Austin, TX 78713-7819 increase the former. We do so by collecting data on the population of Supreme Court and a sample of appeals court search and seizure decisions from 1961 through 1990.

Principal-Agent Theory

The world of law has long recognized the relationship between a principal, "one who has permitted or directed another to act for his benefit and subject to his direction or control" (Seavey 1964) and an agent, one who acts in behalf of the principal. The courts have considered agency "a fiduciary relationship," where the agent has a primary duty to act primarily for the benefit of the principal (*Reed v. Bunger*, 122 N.W. 2d 290, 294).

The principle that one will operate solely or primarily for the benefit of another contradicts the fundamental economic notion of self-interest. This will particularly be the case when enforcement is problematic. Given these realities, economists have adopted the principal-agent paradigm as a tool for understanding market activity. A familiar example is stockholders who cannot observe whether corporate management is maximizing profits. Economists, though, have expanded the notion of agency to include any situation where (1) one person, the agent, chooses action among at least two alternatives; (2) that action affects the welfare of both the agent and the principal; and (3) the principal then rewards (or punishes) the agent based on observed results (Arrow 1986; Moe 1984). More recently, scholars have employed principal-agent theory to increase our understanding of the political world. Congress has been the main focus of such studies, both as agent and as principal.

Most important to our purposes is the use of principal-agent theory to explain hierarchical control of organizations (Moe 1984). Difficulty in monitoring the actions of subordinates, asymmetric information in the form of expertise, or transactions costs in overturning the actions of subordinates all can give agents some opportunities for discretion. Typically, principals find means to ameliorate these problems, for example, by relying on signals that warn them when agents step outside certain bounds.

Some principal-agent analysts distinguish between "congruence," the degree to which agents follow the wishes of principals, and "responsiveness," the degree to which agents change their behavior as the desires of principals change. Agents may have considerable room for discretionary action or "shirking" (so that congruence may not be perfect) yet at the same time be quite responsive to changes in the desires of principals. The relationship is in some ways like that of persons walking their dogs. The dog on a leash is free to lead or follow the owner. The dog's position is not congruent with that of the owner, but the degree of incongruence is limited by the length of the leash selected by the owner. And when the owner changes direction and pulls on the leash, the dog follows (it is responsive to changes in the owner's position).

Insights from principal-agent theory have not heretofore been applied to the judicial hierarchy, yet the circumstances fit the model well. The Supreme Court is the principal, whose subordinates, the courts of appeals, are the agents. If the circuit courts consisted of faithful agents, they would obediently follow the policy dictates set down by the Supreme Court. But utility maximizing appeals court judges also have their own policy preferences, which they may seek to follow to the extent possible. Because Supreme Court justices for the most part learn only of circuit decisions that are appealed to them, and can act only on those that are appealed, most decisions of the courts of appeals will escape consideration by the Supreme Court. Even when appeals court decisions are appealed to the Supreme Court, the number of appeals is so large that the High Courts can give most petitions only a cursory review. A simple view of monitoring might hold that appeals court judges would be less likely to shirk when the chances for reversal are high, but this theory views monitoring as independent of the lower court's decision. If litigants are rational, it is the decision itself that will lead to appeal. The decisions in which circuit judges follow their own preferences should be the most likely to be appealed; those that follow Supreme Court preferences should be least likely to be appealed. This is a necessary, though not sufficient, condition for monitoring to be an effective force in judicial interactions.

Congruence and Responsiveness in the Courts of Appeals

In the judicial hierarchy, "congruence" implies that an appeals court and the Supreme Court decide a case the same way, given the facts in the case. "Responsiveness" implies that as the Supreme Court modifies its preferred doctrine, the appeals court modifies its doctrine in the same direction. If the Supreme Court's doctrine becomes more conservative, for example, a responsive lower court would adopt more conservative doctrine as well, even though its decisions might not be entirely congruent with those of the Supreme Court either before or after the change in Supreme Court policy.

Existing studies of jurisprudence do not always draw a clear distinction between congruence and responsiveness, while the findings often appear to depend on the court and time period studied. Most early writing on judicial impact was limited to an examination of compliance, particularly outright refusals of lower court judges to apply the new policy in their rulings in the wake of controversial Supreme Court decisions. But subsequent studies of the decision making of lower federal courts have found few examples of noncompliance (Gruhl 1980; Songer 1987; Songer and Sheehan 1990), suggesting that lower courts eventually adopted doctrine that was largely congruent with that of the Supreme Court. A study of decision making in lower courts following 14 Supreme Court decisions discovered an overall pattern that indicated that both the holdings and reasoning of the High Court were followed to a substantial degree, implying a high degree of both responsiveness and congruence (Johnson 1987). Nonetheless, there was wide variation among courts, indicating that congruence was far from perfect. Noting these findings, a recent assessment of the compliance literature concluded that the "overall extent and frequency of such noncompliance and evasion is unclear" (Songer 1990, 43).

Perhaps more important, a number of studies have suggested that a compliance focus is inadequate to assess the impact of the Supreme Court. The central significance of the Supreme Court for the political system is not the specific decisions it makes but the broad policies it fashions from a series of decisions (Canon 1973). Therefore, it has been argued that to obtain an adequate understanding of the impact of the Court, we need to examine the extent to which the decisional trends of the courts below change in response to significant changes in preferences (Baum 1977).

Use of this broader conception of impact has indicated that state court response to the criminal procedure decisions of the Supreme Court has varied dramatically (e.g., see Canon 1973; Gruhl 1980). Studies of lower federal courts have also discovered wide variation in response to changing Supreme Court policy (Stidham and Carp 1982; Baum 1980; Songer 1987; Songer and Sheehan 1990).

In sum, available evidence on the extent of doctrinal responsiveness and congruence in the lower courts suggests wide variation across time, courts, and policy areas. The reasons for this variation in response are still not well understood. Baum (1978) suggests that lower courts will be less responsive to the Supreme Court in controversial civil liberty cases. Johnson and Canon (1984) suggest that lower courts will be most responsive when the Supreme Court's policy is clear, unambiguous, not overly complex, and readily available. Finally, Johnson and Canon (1984) maintain that the lower court judges' own policy preferences and whether their prior actions have created a commitment to an alternative interpretation will affect the nature of their response. Unfortunately, while there is some evidence from case studies and narrow-gauge analyses that lend plausibility to these speculations, no systematic test of an overall model that would account for variation in lower court response is available.

While analyses of both compliance and the impact of the Supreme Court on the decisional trends of lower courts has added to our understanding of lower court responsiveness, these works have been hindered by a failure to take into account variation in the factual context in which different courts respond to decisions that announce new precedent. Since the agendas of appellate courts may change in response to changed Supreme Court policy, analyses of the decisional trends of those courts will be difficult to interpret without the addition of controls for changing fact patterns and changing issues. For example, if following Miranda, trial courts severely restricted the ability of prosecutors to introduce confessions and at the same time defense attorneys were encouraged to challenge very subtle forms of coercion for the first time, the policy reflected in appeals court decisions might be significantly more liberal than it was prior to Miranda, and yet the percentage of appeals court decisions that would be coded as liberal might actually decline. Thus, an analysis of the decisional trends of the courts of appeals that did not take into account the changed facts confronting the appeals court judges would be likely to produce an interpretation of responsiveness that was seriously distorted.

Research Design

We propose to examine congruence and responsiveness in the United States Courts of Appeals, controlling for the facts in the case, contemporary Supreme Court preferences, and the attitudinal predisposition of the lower court. We seek as well to determine the role of monitoring in these decisions.

To examine congruence and responsiveness, we need well-specified models of both appeals court and Supreme Court decision making. Though a global approach to this problem would be preferable to a narrower focus, such a broad-based approach would require a comprehensive model of Supreme Court decision making that included fact patterns from all the different types of cases the Court hears. This cannot be done, and thus we must proceed in a piecemeal fashion. We choose the search and seizure cases and the fact pattern models developed therefrom by Segal (1984, 1985). Segal's model, which examined the place of the intrusion (e.g., home, business, car, etc.), the extent of the intrusion (full search vs. lesser intrusion), the prior justification (warrant and probable cause), and various exceptions to the warrant requirement (e.g., searches incident to arrest), explained 58% of the variance in the Court's decision making and categorized 76% of the cases correctly. Our principal-agent model will include the facts specified by Segal in order to control for case characteristics.

We choose the search and seizure cases for our analysis for several reasons. First, our work requires a well-specified model of Supreme Court decision making. To our knowledge, no fact pattern analyses have performed as well as the search and seizure models (Segal 1984; Segal and Spaeth 1992). But that is not to say that search and seizure cases are unique in being explainable by case fact patterns. Research in capital punishment (George and Epstein 1992), obscenity (Hagle 1991; McGuire 1990; Songer and Haire 1992), and sex discrimination (Segal and Reedy 1988; Wolpert 1991) all demonstrate the robustness of this approach. Second, to determine the relationship between Supreme Court decisions and appeals court decisions, we need a substantive area that has seen a fair amount of change in the Supreme Court's doctrine. In few areas has there been as much change as in the Supreme Court's Fourth Amendment adjudication (Blasi 1983; Funston 1977; Kamisar 1984).

Finally, the choice of search and seizure cases provides a severe test of the expectation that appeals court judges will be responsive to changing Supreme Court doctrine and policy. First, application of the exclusionary rule would seem to result in "controversial civil liberties cases," the type of case in which lower courts are thought to be least responsive (Baum 1978). In addition, as noted above, Supreme Court doctrine is often characterized as ambiguous and complex, two factors that are also expected to reduce responsiveness (Johnson and Canon 1984). While outright defiance has not been discovered, earlier studies have questioned the responsiveness of the appeals courts to controversial, complex criminal justice decisions of the Supreme Court (Songer and Sheehan 1990). Moreover, it is well established that the policy values of lower federal court judges are significantly related to their criminal justice decisions (Rowland, Songer, and Carp 1988; Carp and Rowland 1983; Songer and Sheehan 1990).

Legal culture arguments suggest that the circuit courts will be affected by *contemporary* Supreme Court preferences (Howard 1981; Richardson and Vines 1970). Therefore, any assessment of Supreme Court preferences over time must consider whether those preferences have changed and how they have done so. Most systematic attempts to measure change on the Supreme Court or among individual justices have measured the percentage of cases decided in a liberal or conservative direction over time (e.g., Brenner and Arrington 1983; Ulmer 1973, 1979). Such designs have much to tell scholars, but they attribute all change to the justices and none to the changing nature of the cases (see Baum 1988 for a notable exception). Fortunately, we already can control for case characteristics (see above). To measure change explicitly, after controlling for the facts of the case we tested a variety of models of how the Court's decisions have changed in search and seizure. We concluded that the model suggesting that the Court has become increasingly conservative with each passing term since the advent of the Burger Court is superior to plausible alternatives.¹ The parameter estimate for the term variable, .0919, suggests that a search that had a 50% chance of being upheld in the 1968 term would have an 89% chance of being upheld in the 1990 term. Our principal-agent model will therefore include a measure of changing Supreme Court policy orientation that takes the value of zero during the Warren Court years and increases by one for each successive year beginning with the advent of the Burger Court.

While the influence of the legal subculture on lower court decision making is often acknowledged, for several decades most empirical analyses of appellate courts have been based at least in part on an attitudinal model of decision making.² Both the attitudinal model and principal-agent theory suggest that appeals court decision making will be affected by the attitudes of the judges on the case, independent of the policy or doctrinal trends on the Supreme Court. Given the discretion that exists in deciding appellate cases and given the low likelihood of being overturned on appeal, judges, whom we view as strategic political actors, should prefer that their own preferences. That is, other things being equal, liberal judges will prefer liberal decisions emanating from their court.

Unfortunately, we do not have direct, independent measures of the ideology of hundreds of appeals court judges, nor is it feasible to obtain them. We can however use several indicators to create an inferential measure of ideology. Those indicators are the ideology of the appointing president of the judge (Carp and Rowland 1983; Tate 1981; Tate and Handberg 1991), whether the judge is from the South (Songer and Davis 1990; Tate 1981; Tate and Handberg 1991; Carp and Rowland 1983),

¹Like Segal (1985), we find that models involving changing constants are superior to models involving changing parameter values of the independent variables. Of the models with changing constants, the one hypothesizing increasing conservatism with each term outperformed models hypothesizing (1) different constants for the Warren, Burger, and Rehnquist Courts, and (2) models suggesting increased conservatism for each replacement of a Warren Court justice with a Nixon, Ford, Reagan, or Bush appointee. The chi-square for the term model was appropriately lower (177.71 for the term model vs. 179.81 for the appointment model and 178.63 for the chief justice model), the percent predicted correctly was higher (77.95 vs. 76.41 and 76.92), and the significance level of the change variable was lower (.0017 vs. .0040 and .0029).

²See Segal and Spaeth (1992) for the best recent explanation of the attitudinal model.

whether the judge has prosecutorial experience or prior judicial experience (Goldman 1975; Tate 1981), and the religion of the judge (Goldman 1975; Songer 1991).

To develop a suitable surrogate for the ideology of each judge, we began with these five judicial characteristics that the literature suggests may be indicators of judicial values. The specific variables adopted were appointing president (-1 = appointed by conservative ideology conscious president, 0 = appointed by a nonideology conscious president, 1 = appointed by a liberal ideology conscious president),³ region (1 = South, 0 = non-South), prosecutorial experience (1 = yes, 0 = no), prior judicial experience (1 = yes, 0 = no), and religion (1 = Catholic, 0 = other). We first computed the simple bivariate relationship between each of these judicial characteristics and the judges search and seizure votes to confirm that each variable was in fact related to search and seizure votes. Each of the five correlations was in the predicted direction and significant at the .05 level.⁴

To create an overall index of judicial ideology, we first ran a logit model of the effect of these five judicial characteristics on judicial votes. The beta weights from this model were then used to weight the contribution of each judicial characteristic in an index of judicial ideology. Thus, each judge's "ideology score" is the weighted sum of his or her score from the five background characteristics.⁵ Specifically, *judicial ideology* = .353 region - .311 appointing president + .381 religion + .189 prosecutor + .152 judicial experience. These judicial ideology scores are then averaged across the judges serving in any case to determine the attitudinal preferences of any given appeals court panel. While the measures of Supreme Court and appeals court ideology are related (r = .27), there is enough unexplained variance between the two to assess the independent effects of each.

Measuring the effect of monitoring is not easily done. If monitoring were exogenous to the lower court's decisions, then judges should shirk less when the likelihood of appeal and reversal are high. But if litigants

³We relied on the classification of presidents developed by Tate and Handberg (1991). Carter, who was not included in this classification, was scored as a liberal ideology conscious president.

⁴Specifically, the gammas for the bivariate relationships of the judicial characteristics and judicial votes were: .23 for region, -.20 for appointing president, .21 for religion, .07 for prosecutorial experience, and .08 for judicial experience.

⁵One advantage of using the logit weights for each variable, instead of some arbitrarily determined method for creating an index from these variables, is that any measurement error should be random. However, when we reran the analyses reported below with a simple index using the unweighted sum of the variables, the results were virtually the same as those reported below.

are rational, it is the decision of the lower court that leads to appeal and the possibility of reversal. While an instrumental variable technique is often useful in such situations, the low probability of reversal (2% in our sample) makes any such instrument all but worthless. Instead, we examine a necessary condition for monitoring to be effective: whether litigants are more likely to appeal those cases that rely more on the preferences of the lower court judges than on those of the Supreme Court.

Results

Our data consist of a random sample of the decisions of the United States Courts of Appeals in search and seizure cases decided with opinions (including *per curiams*) published in the *Federal Reporter* from calendar year 1961 through 1990.⁶ The unit of analysis was the search. In those few opinions that discussed the validity of several unrelated searches, each search was coded separately.

The coding rules employed by Segal (1984) were adopted for the coding of each of the case facts in the model described above.⁷ Like Segal, we coded our dependent variable as one if the court either found the challenged search to be reasonable or allowed the evidence obtained from the search to be used; if not, the dependent variable was coded zero. In order to assess the impact of both the values of the appeals court judges and changing Supreme Court policy on the likelihood that a given search would be upheld while the relevant facts of the case were controlled, we conducted a logit analysis.

Table 1.A applies our model derived from the Segal fact model to the courts of appeals. Table 1.B shows a similar model applied to all

⁶We first determined the population of circuit court search and seizure cases by searching Westlaw for all cases with the topic "searches and seizures," all Fourth Amendment cases, criminal law topics 219, 226, 364, 365, 394, and 207, plus several relevant combinations of keywords. The list of cases generated by these searches was put in a file, from which we took a stratified random sample of 40 cases per year. Any case from our sample that turned out not to be a search and seizure case was replaced with the next listed case. For years in which fewer than 40 search and seizure cases were published, all published cases were included in the sample. We limited our analysis to the published decisions in part because it would be prohibitively expensive to obtain the information necessary for our model from unpublished decisions. In addition, it seems reasonable to believe that the problems of agency will be less important in unpublished cases. Policy-oriented judges and justices presumably are more concerned with shaping doctrine than with the fate of the particular litigants before them. Since unpublished decisions contribute little to the development of doctrine, appeals court judges should have little incentive to shirk.

⁷It should be noted that like Segal (1984) we accepted the decision of the lower court as to whether subjectively determined facts (e.g., whether there was probable cause) were present. That is, we coded case facts from the perspective of their status prior to the decision of the appeals courts.

Independent			
Variable	MLE	SE	Impact
House	-0.93**	.35	22ª
Business	-0.98*	.42	23
Person	-0.55	.42	14
Car	-0.32	.37	08
Extent of search	-0.23	.40	06
Warrant	0.85***	.26	.20
Probable cause	1.76***	.24	.35
Incident arrest	1.22***	.29	.27
After arrest	0.41	.29	.10
After unlawful	0.06	.62	.02
Exceptions	1.56***	.23	.33 ^b
Change	0.04**	.01	.01°
Intercept	-0.03	.54	
% categorized corrections (false positive = Reduction in error = $-2 \times LLR = 666.2$ Model chi-square = $N = 1,044$; mean of	ctly = 88.9. 10.2; false negative = 22.1%. 21. 189.60; df = 12; p < f dependent variable =	= 24.6). < .0001. = .857.	

Table 1.A. Logit Analysis of the Impact of Case Facts on the Likelihood of Appeals Court Decisions Upholding the Validity of Challenged Searches

^aImpact = change in probability of search being upheld when case fact is present for a search with a 50% chance of being upheld. ^bImpact of one exception present.

^cImpact of change of one year.

*significant at .05; **significant at .01; ***significant at .001.

Supreme Court search and seizure decisions for the same years. The coefficients in Table 1 show the change in the log of the odds ratio for a decision upholding the validity of a search, given the presence of each fact. Since this coefficient is not readily interpretable, we provide under the column labeled "impact" the estimated increase or decrease in the probability that the search will be upheld when the variable in question is present. The impact estimate assumes that the search otherwise has a 50-50 chance of being upheld.⁸ For example, the estimates in Table 1

⁸At any other value, the estimated impact depends on whether the coefficient is positive or negative. Only at .50 is it symmetrical and thus nonarbitrary.

Independent		
Variable	MLE	SE
House	-3.52***	.94
Business	-2.92**	.98
Person	-2.27**	.89
Car	-2.53**	.97
Extent of search	-1.73**	.61
Warrant	1.94***	.58
Probable cause	-0.18	.43
Incident arrest	3.04**	1.18
After arrest	1.04	.59
After unlawful	-0.05	.60
Exceptions	1.52***	.39
Change	0.11***	.02
Intercept	-4.86	2.23
% categorized corrections (false positive = Reduction in error $-2 \times LLR = 193$. Model chi-square = N = 195; mean of C	ectly = 73.4. 42.5; false negative = 40.4%. 53. (55.27); df = 12; p dependent variable	e = 17.1). e < .0001. = .631.

Table 1.B. Logit Analysis of the Impact of Case
Facts on the Likelihood of Supreme Court
Decisions Upholding the Validity of
Challenged Searches

indicate that a search without a warrant that had a 50% chance of being upheld would have a 70% chance of being upheld if the officers had had a warrant. Note that the places where searches occurred are all compared to a search where one does not have a property interest and that the arrest estimates are all compared to a search that was not preceded by an arrest.

To assess the congruence of the courts of appeals with Supreme Court doctrine, we first examine how well the Supreme Court case fact model explains the search and seizure decisions of the lower courts. Consistent with the earlier findings of Segal (1984), it can be seen from Table 1.B that each of the four locational variables (home, business, car, and person) is strongly and negatively related to the probability of the search being upheld by the Supreme Court. That is, all four places examined decrease the probability of a search being upheld when compared to a search where one does not have a property interest. The data in Table 1.A show a very similar pattern in the search and seizure decisions of the courts of appeals. All four location variables have negative coefficients, and the two locations that Segal found to have the greatest impact (home and business) are both strong and statistically significant. Thus, there appears to be substantial congruence in the effects of place on decisions of the Supreme Court and the courts of appeals.

In the Supreme Court (Table 1.B), both the existence of a warrant and the justification of a search as incident to arrest significantly increased the chance that the Court would uphold the search. Similarly, both variables were strongly related to the likelihood that the courts of appeals would uphold the search and both were statistically significant. In addition, the finding of the trial court that probable cause existed for the issuance of the warrant or for a search conducted without a warrant substantially increased the probability that the appeals court would uphold the search. While Segal (1984) did not find that the impact of probable cause was statistically significant in the Supreme Court model, the importance of probable cause discovered in the courts of appeals is consistent with the importance attached to probable cause in Supreme Court doctrine. Finally, in both the Supreme Court and the courts of appeals, the findings of the courts below that one or more of the exceptions to the warrant requirement recognized in Supreme Court doctrine were present (e.g., a search with consent or the discovery of evidence in "plain view") substantially increased the probability that the search would be upheld.

Overall, the model of appeals court search and seizure decisions performs quite well. The model correctly predicts over 88% of the decisions of the courts, and in spite of a highly skewed dependent variable, the model achieves a 22% reduction in error.⁹

The strong parallelism in the impact of case facts on decisions in the Supreme Court and the courts of appeals suggests a high degree of ap-

⁹In the model displayed in Table 3, there appears to be a relatively modest reduction in error over the accuracy that could be obtained by predicting that every vote would be conservative. Thus, some caution is necessary when generalizing from the model. The modest reduction in error appears to be due to the extreme skew of the dependent variable (86% of the votes uphold the validity of the search). To provide at least a partial test of this hunch, we adopted the strategy utilized by Songer and Sheehan (1922, 249). We selected a new sample with a dependent variable that was not skewed by combining all of the liberal votes with a 17% sample of conservative votes. The model in Table 3 was then rerun on this new sample. In the model for this new sample, all of the variables (except *person*, which was statistically nonsignificant) had the same sign as in the original table and the model correctly predicted 71.7% of the votes with a reduction in error of 50.0%. peals court congruence with Supreme Court search and seizure doctrine. While the models are not identical, the effects of most of the case facts are both in the same direction and of similar relative magnitudes in the Supreme Court and the courts of appeals. To better illustrate the extent of congruence between the courts, Table 2 provides estimates derived from the models in Tables 1.A and 1.B of the probabilities of upholding a search in the two levels of courts for several cases with varying fact patterns. The table shows substantial, but imperfect, congruence between the probability that each court will uphold the four sample cases. The rank ordering of the cases is identical in the two courts. Moreover, congruence is greatest at the extremes (i.e., the cases which are most and least favorable for the defendant). That is, for cases that Supreme Court doctrine leads to a clear expectation that the search will either be upheld or not upheld, there is a substantial probability that the appeals court will come to the same conclusion.

As we have stressed, congruence and responsiveness are distinct

Case Fact Pattern	Supreme Court Probability %	Appeals Court Probability %
Case 1	13.1	22.4
Case 2	52.1	35.2
Case 3	82.6	53.8
Case 4	99.8	94.5

Table 2. Estimated Probabilities for a Decision by the Supreme	e
Court and the Courts of Appeals Upholding a Search for	
Selected Case Fact Patterns	

Case Fact Patterns:

Case 1: Full search of business without a warrant or probable cause before any arrest, in the absence of any recognized exceptions to warrant requirement; decided in 1969.

Case 2: Less than full search of home without a warrant or probable cause, in the absence of recognized exceptions to the warrant requirement, following an unlawful arrest; decided in 1976.

Case 3: Less than full search of business, with a warrant, before any arrest; decided in 1976.

Case 4: Full search of area not generally recognized as implicating privacy interests (i.e., not a house, business, person, or car), without a warrant or probable cause, but justified by the lower court as a search necessitated by exigent circumstances and incident to a valid arrest; decided in 1983.

685

issues, though ones that can be related. We study responsiveness in the following way. We have included a time change variable in the Supreme Court model that captures changes over time in the behavior of the Supreme Court (for a discussion, see Segal 1985). The change variable included in the model presented in Table 1.B reflects the growing conservatism of the Court beginning with the appointment of Warren Burger as chief justice. We include a similar variable in the appeals court equation. If decisions in the courts of appeals track doctrinal changes in the Supreme Court, then the Supreme Court change variable included in the appeals court model should be positive, robust, and statistically significant. As shown in Table 1.A, changing Supreme Court policy has a strong positive effect on the courts of appeals that is significant at the .01 level. The overall response to Supreme Court change is substantial. The parameter estimate for the change variable of .044 suggests that an appeals court search that had a 50% chance of being upheld in 1968 would have a 73% chance of being upheld in 1990, as the courts of appeals responded to the growing conservatism of the Burger and Rehnquist Courts. Thus, the courts of appeals appear to be quite responsive to, as well as quite congruent with, Supreme Court policy.

This analysis shows covariance in the decisions at the two levels. However, the responsiveness of the lower courts may be due to the makeup of the lower courts rather than patterns of control within the judicial hierarchy. The appeals courts, like the Supreme Court, have become more conservative over the past 20 years, but we do not know whether this trend is due to the Supreme Court becoming more conservative or whether it is simply due to the appeals courts—through the same appointment process that made the Supreme Court more conservative becoming more conservative too. We next consider the second component of such a perspective: the role of the attitudes and values of the agent.¹⁰

¹⁰The nature of the cases coming to the courts of appeals may also have changed over time. But since the effect of the variable representing changing Supreme Court preferences over time exerts an independent effect after the relevant case fact effects are controlled, this change over time cannot be accounted for by such changes in the nature of the cases. It might also be suggested that the increasingly conservative decisions of the courts of appeal over time were the result not of changing Supreme Court policy but instead reflected increasingly conservative public opinion or an agenda change in the courts of appeal resulting from a decrease in the number of state habeas corpus cases and a corresponding increase in the number of federal criminal prosecutions that reached those courts. We tested for both possibilities. We reran the model (presented in Table 4) that included both the Supreme Court change and courts of appeals ideology variables with the addition of two variables. The first, designed to tap changing public opinion, is the summary annual measure of "public mood" reported by Stimson (1992). The second variable simply indicated As a first approximation of the impact of judicial values on the search and seizure decisions of appeals court judges, we examined the relationship between the index of the ideology of each appeals court panel and its search and seizure decisions. From Table 3, it may be seen that the relationship is in the predicted direction, moderately strong (MLE = .563), and statistically significant at the .001 level. An alternative measure of the relationship, computing the Pearson correlation, suggests a similar conclusion. The modest relationship, r = .11, is also significant at the .001 level.

The data analyzed above indicate that the decisions of the courts of appeals are affected by both Supreme Court policy and the ideology of the judges on the appeals court panel. To distinguish these two effects, in Table 4 we control for the attitudinal predispositions of lower court judges. Consistent with the principal-agent perspective, the data indicate that the decisions of the courts of appeals reflect independently both Supreme Court policy and the ideology of judges on the appeals court panel.

Overall, the combined model provides a satisfactory explanation of appeals court decisions. Together, case facts, a measure of changing Supreme Court policy, and panel ideology achieve almost a 90% prediction rate with a reduction in error of 22.3%. Case facts continue to exercise strong independent effects that parallel those reported for the Supreme Court in Table 1.B. Thus, there is considerable congruence between appeals court and Supreme Court decisions even when appeals court ideology is taken into account. But even under control for these case facts, both the changing policy of the Supreme Court and the ideology of the appeals court judges exert strong influences that are significant at the .01 level.¹¹ As the Supreme Court became more conservative following the

whether the challenged search occurred in a federal prosecution or in a state prosecution. Both variables were statistically insignificant, and their addition to the logit model had negligible effects on the coefficients for the Supreme Court change variable (we reran the model again with the more specific measure of the "crime, liberties, and guns" mood developed by Stimson 1992 with the same results).

¹¹Since the ideology both of the Supreme Court and of appeals court panels changes with the appointment of new judges over time by the same presidents, one might be concerned that our measures of the ideologies of the two courts are too highly correlated to permit meaningful analysis. We discovered that while the two measures are correlated to a statistically significant degree, the strength of the relationship is a quite modest r = .26. The modest size of this correlation is probably because President Carter was able to appoint a rather large number of appeals court judges even though he did not have a chance to make any appointments to the Supreme Court. As a result, a substantial number of moderate and liberal appeals court panels continued to sit throughout the Reagan years when the

Independent		
Variable	MLE	SE
Panel ideology	0.56***	.16
Intercept	1.58	.10
% categorized corr (false positive = Reduction in error $-2 \times LLR = 855$	rectly = 85.8 . 14.2; false negative = 0. 	= 0).
Model chi-square	= 13.47; $df = 1; p <$	< .001.
N = 1,063; mean o	f dependent variable	= .858.

Table 3. Logit Model of the Relationship of
Ideology of Appeals Court Panel to Decision on
Validity of Search

*** significant at .001 level.

appointment of Chief Justice Burger, the courts of appeals responded with more conservative decisional trends. In fact, the data in Table 4 indicate that the impact of changing Supreme Court policy is not diminished at all by the addition of a control for the ideology of the judges on the courts of appeals. A search that had a 50% chance of being upheld in the courts of appeals in 1968 had a 73% chance of being upheld in 1990. Nevertheless, the ideology of the appeals court panel also exerted a strong independent impact. A search that had a 50% chance of being upheld by the most liberal panel in our sample has an estimated chance of 87% of being upheld if the case is heard instead by the most conservative panel. As in the metaphor of the dog on the leash, some appeals court panels led and some followed "the owner," but when the Supreme Court tugged on the leash, both liberal and conservative panels were responsive.

We now turn to an inferential measure of control in the judicial hierarchy, related to the monitoring function of litigants. Principal-agent theory suggests that the responsiveness of the agent (the courts of appeals) should be influenced by the monitoring of the principal. When interviewed, judges on the courts of appeals nearly unanimously concede that

Supreme Court became progressively more conservative. For example, we divided our measure of panel ideology into three groups of approximately equal size in our sample of the entire period and labeled the panels "liberal," "moderate," and "conservative." When we examined the changing distribution of panel liberalism over time, we noted that, even in the 1980s, 21.6% of the panels were liberal, and 34.3% were moderate.

689

Independent			
Variable	MLE	SE	Impact
House	-0.88**	.35	21ª
Business	-0.97*	.43	22
Person	-0.43	.43	11
Car	-0.29	.37	07
Extent of search	-0.15	.41	04
Warrant	0.85***	.27	.20
Probable cause	1.74***	.24	.35
Incident arrest	1.24***	.29	.25
After arrest	0.42	.29	.10
After unlawful	0.01	.62	.00
Exceptions	1.55***	.23	.32 ^b
Change	0.04**	.01	.23°
Panel ideology	0.45**	.18	.28°
Intercept	-0.24	.56	
% categorized corre	ctly = 89.0.		
(false positive =	10.1; false negative =	= 25.4).	
Reduction in error =	= 22.3%.		
$-2 \times LLR = 656.6$	57.		
Model chi-square =	194.63; $df = 13; p <$	< .0001.	
N = 1,041; mean of	dependent variable	= .858.	

Table 4. Logit Analysis of the Impact of Case Facts and Panel Ideology on the Likelihood of Appeals Court Decisions Upholding the Validity of Challenged Searches

^aImpact = change in probability of search being upheld when case fact is present for a search with a 50% chance of being upheld.

^bImpact of one exception present.

^cImpact of change from most liberal to the mean value.

*significant at .05; **significant at .01; ***significant at .001.

they are agents of the national government who are bound by Supreme Court precedents (Howard 1981). Yet whether their responsiveness to the High Court noted above is enhanced by the Court's monitoring or is solely a function of their own internalized norms that are reinforced by their peers in the circuit is difficult to determine empirically. Reversal is such a rare phenomenon (under 2% of the cases in our sample) that there are not enough cases to determine whether the behavior of individual judges, particular panels, or even whole circuits changes in response to instances of such monitoring by the Supreme Court.

As noted above, if the litigants are rational actors, then the likelihood

of appeal is not a function of the nature of the case but is instead a function of the nature of the decision. That is, the agents do not control which cases are monitored; instead the losing litigant, if rational, will appeal those cases in which it appears that the agent has been least faithful to the wishes of the principal. If this perspective is correct, then the impact of Supreme Court policy should be greatest and the impact of judicial ideology least in those cases in which no petition for review is filed. This expectation is tested in Tables 5 and 6, in which the combined model is run separately for those cases that were appealed¹² and those in which the appeals court loser did not seek further review.

Comparison of those cases in which no review was sought to those that were appealed provides strong support for the expectation that litigants will not seek to invoke monitoring when the agents appear to have been faithful to their principal. The impact of Supreme Court policy change in cases not appealed, .020, is significant at the .001 level and is more than three times as great as its impact (.006) in cases where petitions for review were filed. In contrast, the impact of the ideology of the appeals court judges is substantially higher in cases appealed than in those not appealed (.049 vs. .026).

Conclusions

A central concern of principal-agent theory is control and discretion in hierarchical relationships. Although search and seizure decisions are not typical of judicial decisions, the cases provided a severe test of appeals court responsiveness to the Supreme Court because they combine a number of characteristics (controversial civil liberties policy, complexity, and ambiguous precedents) previously found to reduce responsiveness. With the deck thus somewhat loaded against a finding of congruence and responsiveness, the high degree of both congruence and responsiveness actually found is impressive. Case facts, which both doctrinal and empirical studies of Supreme Court search and seizure decisions found to be important, had significant impacts on courts of appeals decisions. And even after the effects of these case facts were controlled, the courts of appeals were highly responsive to changing policy trends on the Supreme Court. Thus, judges on the courts of appeals appear to be relatively faithful agents of their principal, the Supreme Court.

Of course, one must be careful in generalizing from these results. As noted above, the need to use an existing well-specified model of Supreme

¹²More technically, the model was run on all cases in which the losing litigant in the appeals court sought Supreme Court review either through a petition for certiorari or an appeal.

Independent			
Variable	MLE	SE	Impact
House	-0.27	.46	07ª
Business	-0.24	.56	06
Person	-0.01	.58	00
Car	0.28	.48	.07
Extent of search	-0.63	.57	15
Warrant	0.22	.36	.06
Probable cause	1.88***	.33	.37
Incident arrest	1.28***	.37	.28
After arrest	0.62	.40	.15
Exceptions	1.26***	.30	.28 ^b
Change	0.08***	.02	.02°
Panel ideology	0.10	.07	.03
Intercept	-0.82	.74	
% categorized correct (false positive = Reduction in error $-2 \times LLR = 376$. Model chi-square = N = 537; mean of correct	ectly = 87.9. 11.7; false negative = = 28.6%. 70. = 112.00; $df = 12; p <$ dependent variable =	< .0001. .830.	

Table 5. Logit Analysis of the Impact of Case Facts and Panel Ideology on the Likelihood of Appeals Court Decisions Upholding the Validity of Challenged Searches: Cases Not Appealed

^aImpact = change in probability of search being upheld when case fact is present for a search with a 50% chance of being upheld.

^bImpact of one exception present.

^cImpact of change of one year.

*significant at .05; **significant at .01; ***significant at .001.

Court decision making necessitated the limitation of the analysis to a single issue area. Until similar analyses are conducted using other types of cases, it is not possible to know with certainty whether these findings are generalizable. Moreover, there is no way to measure directly nor to completely quantify all similarities and differences in the policies and legal interpretations of courts; our measures of the degree of congruence between the policies of the Supreme Court and the courts of appeals are therefore indirect and imperfect. But the strong parallelism in the impact of case facts on decisions in the Supreme Court and the courts of appeals in combination with the substantial covariation of appeals court outcomes with the changing ideological orientation of the Supreme Court provides

independent					
Variable	MLE	SE	Impact		
House	-1.69	1.35	34 ^a		
Business	-2.95*	1.48	45		
Person	-1.65	1.57	33		
Car	-1.48	1.51	31		
Extent of search	-1.57	1.54	32		
Warrant	2.31*	1.02	.41		
Probable cause	3.71***	0.80	.47		
Incident arrest	1.69	1.03	.34		
After arrest	0.67	1.13	.16		
Exceptions	4.85***	1.25	.49 ^b		
Change	0.02	0.08	.01°		
Panel ideology	0.19	0.22	.05		
Intercept	1.01	2.09			
% categorized correction (false positive =	ectly = 97.6. 1.6; false negative =	15.8).			
Reduction in error	= 61.9%.				
$-2 \times LLR = 66.9$	5.				
Model chi-square =	= 89.11; $df = 12; p <$.0001.			
$N = 328$; mean of α	lependent variable =	.936.			

Table 6. Logit Analysis of the Impact of Case Facts and Panel Ideology on the Likelihood of Appeals Court Decisions Upholding the Validity of Challenged Searches: Cases Appealed to the Supreme Court

^aImpact = change in probability of search being upheld when case fact is present for a search with a 50% chance of being upheld.

^bImpact of one exception present.

^cImpact of change of one year.

*significant at .05; **significant at .01; ***significant at .001.

substantial indirect support for the interpretation derived from principalagent theory.

Nevertheless, the high degree of responsiveness to their principal's policy mandates did not prevent entirely the judges on the courts of appeals from pursuing their own policy preferences. After controlling for the effects of changing Supreme Court policy and fact situations, there was still a substantial difference between liberal and conservative panels of judges in the likelihood of upholding the validity of the challenged search. These findings suggest that appeals court judges are substantially constrained by the preferences of their principal, but the complexity and tremendous variety of the fact situations presented on appeal frequently provide them with room to maneuver. It appears that as the Supreme Court became steadily more conservative during the 1970s and 1980s, both liberal and conservative appeals court judges acquiesced in the general thrust of the changing demands of their principal, but still found opportunities to shade the new policies toward outcomes that were more compatible with their respective ideologies. Given the previous studies that found nearly universal compliance in the courts of appeals, our findings suggest that the appeals court judges were able to shirk, thereby partially advancing their own policy preferences, by interpretations of Supreme Court doctrine in ambiguous situations that were not directly noncompliant.

Supreme Court reversals are so infrequent that it was impossible for us to assess statistically whether judges who were reversed subsequently changed their behavior and became less likely to shirk in the future. The extreme rarity of reversals may at first appear to pose a challenge to a principal-agent analysis of the judicial hierarchy. But the "paradox" of (relatively) effective control and rare reversals is more apparent than real. If an appeals court anticipates that it will be sanctioned in the form of a reversal, the anticipated response will keep the court in check. The key to this anticipated response is a "fire alarm" from a third party who relieves the principal of part of the burden of monitoring the agent. For example, interest groups monitor the behavior of bureaucrats, sounding fire alarms when an agency deviates from the desires of a congressional committee. Consequently, the committee rarely needs to hold oversight hearings to control agency behavior (McCubbins and Schwartz 1984). In the judicial system, litigants perform a similar role in sounding fire alarms. Appeals court judges must be constantly aware that the losing litigants and their attorneys have both the competence and the will to scrutinize their decisions intensely and will bring flagrant doctrinal shirking to the attention of the principal. We believe this knowledge leads judges to anticipate a fire alarm and a sanction in the event of excessive shirking; in turn, this anticipated response induces a great deal of responsiveness and doctrinal congruence even though the actual level of reversals is very low.

The findings from Tables 5 and 6 are consistent with this hypothesized linkage between anticipated reactions and agent responsiveness. In over 60% of the cases in our sample, the losing litigants did not exercise their right to seek Supreme Court review. In these unreviewed cases, there was very strong congruence between the appeals court decisions and Supreme Court policy coupled with a weak relationship between the judges' ideology and their decisions. It is reasonable to speculate that in these cases the litigants did not appeal because they believed that they could not plausibly argue that the agents had ignored the mandates of their principal. In contrast, in the minority of cases in which the losing litigants sought review, there was a basic congruence between the decisions of the courts of appeals and the long-term doctrines of the Supreme Court (reflected in the significant effects of the case facts on decisions) and a much lower degree of responsiveness to the changing current policy of the Court.

Manuscript submitted 2 August 1993 Final manuscript received 24 November 1993

REFERENCES

- Arrow, Kenneth. 1986. "Agency and the Market." In Handbook of Mathematical Economics, vol. 3, ed. Kenneth J. Arrow and M. D. Intriligator. New York: Elsevier.
- Baum, Lawrence. 1977. "Judicial Impact as a Form of Policy Implementation." In Public Law and Public Policy, ed. John A. Gardiner. New York: Praeger.
- ———. 1978. "Lower Court Response to Supreme Court Decisions: Reconsidering a Negative Picture." Justice System Journal 3:208–19.
- . 1980. "Response of Federal District Judges to Court of Appeals Policies: An Exploration." Western Political Quarterly 33:217–24.
- ——. 1988. "Measuring Policy Change in the U.S. Supreme Court." American Political Science Review 82:905–12.
- Blasi, Victor. 1983. The Burger Court: The Counter-Revolution That Wasn't. New Haven: Yale University Press.

Brenner, Saul, and Theodore Arrington. 1983. "William O. Douglas: Consistent Civil Libertarian or Parabolic Supporter?" Journal of Politics 45:490–96.

- Canon, Bradley C. 1973. "Reactions of State Supreme Courts to a U.S. Supreme Court Civil Liberties Decision." *Law and Society Review* 8:109–34.
- Carp, Robert A., and C. K. Rowland. 1983. *Policymaking and Politics in the Federal District Courts*. Knoxville: University of Tennessee Press.
- Funston, Richard Y. 1977. Constitutional Counterrevolution. New York: Wiley.
- George, Tracey E., and Lee Epstein. 1992. "On the Nature of Supreme Court Decision Making." American Political Science Review 86:323-37.
- Gibson, James. 1983. "From Simplicity to Complexity: The Development of Theory in the Study of Judicial Behavior." *Political Behavior* 5:7–49.
- Goldman, Sheldon. 1975. "Voting Behavior on the United States Courts of Appeals Revisited." American Political Science Review 69:491-506.
- Gruhl, John. 1980. "The Supreme Court's Impact on the Law of Libel: Compliance by Lower Federal Courts." Western Political Quarterly 33:502–19.
- Hagle, Timothy M. 1991. "But Do They Have to See It to Know It? The Supreme Court's Obscenity and Pornography Decisions." Western Political Quarterly 44:1039-54.
- Howard, J. Woodford. 1981. Courts of Appeals in the Federal Judicial System. Princeton: Princeton University Press.
- Johnson, Charles A. 1987. "Law, Politics, and Judicial Decision Making: Lower Federal Court Uses of Supreme Court Decisions." *Law and Society Review* 21:325-40.
- Johnson, Charles A., and Bradley C. Canon. 1984. Judicial Policies: Implementation and Impact. Washington, DC: Congressional Quarterly Press.

Kamisar, Yale. 1984. "Criminal Law: The Swing of the Pendulum." Nation 239:271-74.

- McCubbins, Mathew D., and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." American Journal of Political Science 28:165-79.
- McGuire, Kevin T. 1990. "Obscenity, Libertarian Values, and Decision Making in the Supreme Court." American Politics Quarterly 18:47–67.
- Moe, Terry. 1984. "The New Economics of Organization." American Journal of Economics 28:739–77.
- Perry, H. W. 1991. Deciding to Decide. Cambridge: Harvard University Press.
- Richardson, Richard, and Kenneth Vines. 1970. The Politics of Federal Courts. Boston: Little, Brown.
- Rohde, David, and Harold Spaeth. 1976. Supreme Court Decision Making. San Francisco: Freeman.
- Rosenberg, Gerald N. 1991. The Hollow Hope. Chicago: University of Chicago Press.
- Rowland, C. K., Donald Songer, and Robert A. Carp. 1988. "Presidential Effects on Criminal Justice Policy in the Lower Federal Courts: The Reagan Judges." *Law and Society Review* 22:191–200.
- Seavey, Warren A. 1964. Handbook of the Law of Agency. St. Paul: West.
- Segal, Jeffrey A. 1984. "Predicting Supreme Court Decisions Probabilistically: The Search and Seizure Cases, 1962–1981." American Political Science Review 78:891–900.
 - ——. 1985. "Measuring Change on the Supreme Court: Examining Alternative Models." American Journal of Political Science 29:461–79.
- Segal, Jeffrey A., Charles M. Cameron, and Albert D. Cover. 1992. "A Spatial Model of Roll Call Voting: Senators, Constituents, Presidents, and Interest Groups in Supreme Court Confirmations." *American Journal of Political Science* 36:96–121.
- Segal, Jeffrey A., and Albert D. Cover. 1989. "Ideological Values and the Votes of U.S. Supreme Court Justices." *American Political Science Review* 83:557–65.
- Segal, Jeffrey A., and Cheryl D. Reedy. 1988. "The Supreme Court and Sex Discrimination." Western Political Quarterly 41:553-68.
- Segal, Jeffrey A., and Harold J. Spaeth. 1992. The Supreme Court and the Attitudinal Model. New York: Cambridge University Press.
- Songer, Donald R. 1987. "The Impact of the Supreme Court on Trends in Economic Policy Making in the United States Courts of Appeals." *Journal of Politics* 49:830–41.
 - —. 1990. "An Overview of Judicial Policymaking in the United States Courts of Appeals." In American Courts: A Critical Assessment, ed. John Gates and Charles A. Johnson. Washington, DC: Congressional Quarterly Press.
- ———. 1991. "Explaining Outcomes in Criminal Cases: The New Institutionalism, Old Political Modes, and the Older Legal Tradition." Presented at the annual meeting of the American Political Science Association, San Francisco.
- Songer, Donald R., and Sue Davis. 1990. "The Impact of Party and Region on Voting Decisions in the United States Courts of Appeals, 1955–1986." Western Political Quarterly 43:317–34.
- Songer, Donald R., and Susan Haire. 1992. "Integrating Alternative Approaches to the Study of Judicial Voting: Obscenity Cases in the U.S. Courts of Appeals." American Journal of Political Science 36:963–82.
- Songer, Donald R., and Reginald S. Sheehan. 1990. "Supreme Court Impact on Compliance and Outcomes: Miranda and New York Times in the United States Courts of Appeals." Western Political Quarterly 43:297–319.
 - ----. 1992. "Who Wins on Appeal? Upperdogs and Underdogs in the U.S. Courts of Appeals." American Journal of Political Science 36:235-58.

- Stidham, Ronald, and Robert A. Carp. 1982. "Trial Court Response to Supreme Court Policy Changes: Three Case Studies." *Law and Policy Quarterly* 4:215–34.
- Stimson, James A. 1992. Public Opinion in America: Mood, Cycles, and Swings. Boulder, CO: Westview Press.
- Tate, C. Neal. 1981. "Personal Attribute Models of Voting Behavior of U.S. Supreme Court Justices: Liberalism in Civil Liberties and Economics Decisions, 1946–1978." *American Political Science Review* 75:355–67.
- Tate, C. Neal, and Roger Handberg. 1991. "Time Binding and Theory Building in Personal Attribute Models of Supreme Court Voting Behavior, 1916–88." American Journal of Political Science 35:460–80.
- Ulmer, S. Sidney. 1973. "The Longitudinal Behavior of Hugo Lafayette Black: Parabolic Support for Civil Liberties, 1937–1971." Florida State University Law Review 1: 131–53.

——. 1979. "Parabolic Support for Civil Liberties Claims: The Case of William O. Douglas." Journal of Politics 41:634–39.

- Wasby, Stephen L. 1970. The Impact of the United States Supreme Court. Homewood, IL: Dorsey Press.
- Wolpert, Robin M. 1991. "Explaining and Predicting Supreme Court Decision-Making: The Gender Discrimination Cases, 1971–1987." Presented at the annual meeting of the Midwest Political Science Association, Chicago.