Overruled: An Event History Analysis of Lower Court Reaction to Supreme Court Alteration of Precedent

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While past research has demonstrated widespread compliance in the Courts of Appeals with Supreme Court precedent (e.g., Gruhl 1980; Songer 1987; Songer, Segal, and Cameron 1994; Songer and Sheehan 1990), compliance is not automatic and is surely political. We examine compliance with Supreme Court overrulings of precedent—cases in which we might expect the lowest levels of compliance with Supreme Court policy prescriptions. We argue that several variables are relevant to the compliance decision and that those variables fall into two broad categories: characteristics of the Supreme Court precedent and characteristics of the circuit applying the precedent. In our event history analysis, we find that both precedent and circuit characteristics determine whether, and how quickly, a circuit follows a Supreme Court decision that overrules existing precedent; that is, unanimity, complexity, and the age of the overruled precedent, as well as the likelihood of Supreme Court review, are related to the compliance decision. While the Courts of Appeals adopt alterations in Supreme Court precedent rather quickly (within one or two relevant decisions), these factors exert some influence on that speed.

Many scholars spanning several decades have attempted to understand and explain the impact of the U.S. Supreme Court on the lower federal and state courts.[1] An eclectic body of literature exists, complete with competing hypotheses and contrary findings. In the hope of alleviating—if not eliminating—this eclecticism, we offer a methodologically sophisticated approach to conceptualizing lower court compliance with Supreme Court decisions. We attempt to

The authors thank Harold Spaeth, Jim Granato, Neal Beck, Tse-min Lin, Gary King, Saul Brenner, Don Songer, Steve Wasby, Susan Haire, Chris Zorn, Dennis Gleiber, and Brandon Prins for their suggestions and comments. In addition, we thank our Women's Judicial Group (especially Rorie Spill and Christine Nemachek) for a helpful discussion. An earlier version of this paper was presented at the 1998 meeting of the Midwest Political Science Association in Chicago. Data used in this paper may be obtained from the Michigan State University Program for Law and Judicial Politics Web site at http://www.ssc.msu.edu/~pls/pljp.

[1] See, for example, Canon and Johnson (1999); Canon and Kolson (1971); Gruhl (1980); Johnson (1987); Manwaring (1972); Peltason (1967); Romans (1974); Sanders (1995); Songer (1987); Songer, Segal, and Cameron (1994); Songer and Sheehan (1990); Tarr (1977); Wasby (1970).

THE JOURNAL OF POLITICS, Vol. 64, No. 2, May 2002, Pp. 534–550

explain lower court treatment of a distinctly significant body of Supreme Court decisions: those in which the High Court is least compliant with its own decisions; that is, we analyze lower court responses to the Supreme Court's alterations of its own precedents.

The impact of institutions in general and the Supreme Court in particular is eminently important, for in the Court's impact comes the effectuation of policy. If the Supreme Court cannot instill its policy prescriptions in its own judicial agents, what influence can it have on society? If, in fact, the lower courts pay scant attention to the Supreme Court, has not Supreme Court scholarship been little more than a waste of time, energy, and brain power? We argue that the Supreme Court does impact society and that compliance by the lower courts evidences that impact.[2] That compliance, however, is not automatic and is most definitely a political process (Canon and Johnson 1999).

We examine lower court responses to Supreme Court decisions that overrule existing precedents, assessing the alacrity with which lower courts adopt the new doctrines. We recognize that these cases are in some ways unique. However, we also deem them to have several advantages. First, using the Warren Court's overrulings allows us to consider compliance with a wide variety of different kinds of cases, in terms of both salience and issue area addressed. Second, we believe these cases offer a unique experimental-type design in which we can examine what happens in a circuit when the Supreme Court hands down a decision that directly conflicts with prior precedent on point. There is a clear break in Supreme Court policy in these cases. How will the lower courts react? Finally, we argue that using these cases is the most stringent test of compliance. Indeed, in this situation, the lower courts have the opportunity to make a good case against compliance, given that the High Court is not even holding its decision in high regard.

Compliance and Impact in Judicial Scholarship[3]

The literature on judicial impact and compliance is voluminous, albeit somewhat contradictory. Because decision making in the Courts of Appeals is particularly complex (Songer and Haire 1992), many variables plausibly exert an influence upon a lower court's decision to dispose of a case in a certain manner. In most cases, the lower court has Supreme Court precedent to interpret and apply, its own policy preferences to pursue, and the relevant law, case facts, litigants, and arguments with which to contend.

Because of the peculiar characteristics of the institution in which they serve, Courts of Appeals judges are subject to influences other than attitudes in their

[2] Of course, institutions beyond the lower courts also contribute to the overall impact of the Supreme Court (Wasby 1972). However, we focus only upon the lower courts; specifically, the Courts of Appeals.

[3] Impact and compliance are not the same. Compliance, however, is a test of impact, and findings consistent with compliance increase the impact of the Supreme Court.

decision making (Segal and Spaeth 1993). To what extent does Supreme Court policy control these judges? If this question can be answered adequately, we can begin to understand better the decision making of these judges.

Mechanisms are arguably in place to limit substantial lower court deviations from the Court's prescribed policy. First, the possibility of reversal deters the lower courts from shirking. While proportionately few such reversals actually occur, due to the Court's shrinking docket,[4] Baum finds that stigma attaches to one's reversal rate (Baum 1978; see also Baum 1976; Caminker 1994). In addition, judges are socialized into the legal culture, thereby having certain role perceptions (Tarr 1977), and they take a pledge to defend and uphold the Constitution, which should count for something (Canon and Johnson 1999). They also have an interest in maintaining the appearance of integrity in order that their decisions be accorded respect. On the other hand, the principal-agent model of Brehm and Gates (1997) may more aptly apply to the courts' hierarchical structure: the lower court will shirk (i.e., not follow) when it does not like the policy, work (i.e., follow) when it does, and sabotage (i.e., attempt to negatively influence) the policy when it really hates it. That is, lower court judges may interpret cases consistently with Supreme Court intent only when they agree with the policy or are indifferent to it (Canon and Johnson 1999).

However, a lower court need not completely thwart Supreme Court precedent in order to limit its impact. Indeed, little evidence of outright defiance has been found in the Courts of Appeals (see, e.g., Songer 1987; Songer and Sheehan 1990). Lower court judges have several options available to them as they apply Supreme Court precedent. They can interpret the precedent narrowly, limiting it to its specific facts (Canon and Johnson 1999). They can cite their own opinions in lieu of the offending precedent (Manwaring 1972). They can distinguish their case from the one for which Supreme Court prescription is available (Baum 1978; Caminker 1994; Manwaring 1972; Songer and Sheehan 1990; Tarr 1977). They can dispose of the case on procedural grounds (Canon and Johnson 1999), they can criticize the Supreme Court while following it (Tarr 1977), or they can simply ignore the offending precedent's existence.

Explaining Lower Court Compliance with Alterations in Precedent

How, then, do we explain lower court compliance with Supreme Court precedent? We examine a unique set of Supreme Court decisions—decisions of the

[4] Richardson and Vines (1970, 149) offer this depiction: "The popular sentiment that one will appeal a case 'all the way to the Supreme Court' is somewhat of a popular myth to the extent that it symbolizes the court's appellate function. A more realistic and accurate statement would be the assertion that the case will be appealed 'all the way to the Court of Appeals.'"

Warren Court that overrule existing precedent[5]—and specify an integrated model of circuit court decisions to adopt these new doctrines. We incorporate a variety of legal and attitudinal influences, including the perceived authority of precedent, judicial attitudes, and the likelihood of Supreme Court reversal.

Supreme Court Case Characteristics

One set of hypothesized influences can be grouped into a "Supreme Court case characteristics" category. These are attributes of Supreme Court decisions that may add to or detract from their authority, clarity, and perceived finality. Each of these factors has been identified in past research as affecting lower court compliance and has been measured in various ways. We utilize several of these measures—***Unanimous***, ***Minimum Winning Coalition***, ***Age of Overruled Precedent***, ***Doctrinal Modification***, and ***Complexity***—and discuss each in turn.

One indicator of the authoritativeness of a decision is the level of support a decision garnered from the Court's members (Canon and Johnson 1999; Johnson 1979). A number of scholars have suggested that the Supreme Court may strive to achieve unanimity in decisions that have important policy implications and that may encounter resistance in their implementation (e.g., Canon and Johnson 1999; Hutchinson 1979; Rohde 1972). We utilize two measures of High Court consensus: ***Unanimous***, indicating that no dissenting votes were cast, and ***Minimum Winning Coalition***, indicating 5–4 or 4–3 decisions as well as 5–3 or 4–2 reversals. Unanimity on the High Court should foster compliance, while precedents established by minimum winning coalitions may meet with resistance.

Age of precedent may also figure into the compliance decision. Brenner and Spaeth argue that: "It might appear somewhat illegitimate for the Court to overturn more recent precedents" (1995, 11). However, they also offer the possibility that older decisions are "so fundamental to the Court's view of the Constitution . . . that they cannot be undone" (11). In order to understand more fully lower court compliance with decisions that overrule precedent, we examine the impact of the age of the overruled precedent on the perceived legitimacy of these decisions. We do this by including a variable for ***Age of Overruled Precedent***, measured in years.[6]

[5] We use those cases identified by Brenner and Spaeth (1995) as Warren Court overruling decisions. They consider any case in which the reasoning states that the decision overruled one or more of the Court's precedents, either in whole or in part, an overruling decision (19). See Appendix A for a listing of the overruling and overruled decisions.

[6] Of course, one may argue that the age of precedent is really tapping into the concept of weight of precedent or of the centrality of the case to the Supreme Court's jurisprudence. However, we continue to view age as a legitimizing factor noting that the idea of centrality should be explored further.

A number of studies have highlighted the importance of a clear and consistent line of precedent in achieving lower court compliance (Canon and Johnson 1999; Gruhl 1980; Johnson 1987; Songer, Segal, and Cameron 1994). When a Supreme Court decision has been altered or obscured by later actions, such revisions should be acknowledged by the circuit courts. Similarly, if Congress amends a statute in reaction to a Supreme Court decision, the judiciary is bound by Congress' new interpretation. Accordingly, we include a measure of ***Doctrinal Modification***.[7]

Competing hypotheses have been offered in the literature regarding lower court compliance with complex decisions. One view is that complex decisions foster confusion in the lower courts, so that compliance is limited (Wasby 1970). Alternatively, a lack of clarity may increase the opportunity for subjective interpretation since noncompliance with a complex decision may be difficult to identify (Johnson 1987). In addition, it may be the case that complex rulings engender a closer reading and hence higher levels of compliance. To measure ***Complexity***, we count the number of legal provisions relied upon and additional issues raised in the overruling decision as identified by Spaeth (1997).[8]

Salient cases should be followed more consistently in the lower courts as they are more visible both to the lower judicial hierarchy and to the general public. Similarly, when a significant precedent is overruled by the High Court, the lower courts should be attentive to the change in doctrine. We account for the policy salience of both the overruled and overruling decisions, according to the listing of major, or landmark, decisions of the Supreme Court in CQ's *Guide to the United States Supreme Court*.

The issue raised in the case may also affect the level of compliance. The Warren Court's criminal procedure decisions embody a "constitutional revolution" (O'Brien 1999, 307). To determine whether the Courts of Appeals were more reluctant to adopt these revolutionary precedents than they were rulings in other issue areas, we include a dummy variable for ***Criminal Procedure*** precedents.

Circuit and Judge Characteristics

In addition to these Supreme Court case characteristics, we expect that circuit-specific and judge-specific factors influence responses to Supreme Court overrulings of precedent. First, we expect that the ideological views of appeals court

[7] The Court substantially modified two Warren Court overruling decisions in later cases. *Fay v. Noia*, 372 U.S. 391 (1963) was modified in *Wainwright v. Sykes*, 433 U.S. 72 (1977) and overruled in *Coleman v. Thompson*, 501 U.S. 722 (1991), and *Miranda v. Arizona*, 384 U.S. 436 (1966) was modified in *Michigan v. Tucker*, 417 U.S. 433 (1974). Congress modified *Marchetti v. United States*, 390 U.S. 39 (1968) with 26 USC §4424, effective 12/1/74.

[8] Do note though, that all issues or legal provisions in the case are counted for this measure, not only those that impinge on the grounds for the overruling.

judges affect their behavior (Goldman 1966, 1975; Richardson and Vines 1970; Songer and Davis 1989; Songer and Sarver 1997; Songer and Sheehan 1990; Stidham and Carp 1982; Tarr 1977). We employ party of the appointing president in computing a measure of the ideological consistency of appeals court panels with Supreme Court decisions.[9]

Our measure of circuit court ideology is ***Ideological Consistency***, measured as the percentage of the appellate panel that is in line ideologically with the direction of the Supreme Court decision, as coded in Spaeth's Supreme Court Database. To illustrate, where two of three judges on a panel were appointed by Kennedy, the third was appointed by Nixon, and the overruling decision was a liberal one, ideological consistency on the panel applying that decision is 67%. By coding ideology in this manner, we are able to incorporate *en banc* decisions and to capture more information than would a dummy variable for majority consistency or inconsistency.

Lower court judges may also consider the likelihood of Supreme Court reversal if they deviate from Court doctrine. As a measure of this possibility, we use the change in the ideological composition of the Supreme Court from the announcement of the overruling decision to the lower court's decision. If lower court judges do, in fact, consider the likelihood of reversal in deciding whether to comply with precedent, they should be attentive to personnel changes on the High Court.

We use the Segal and Cover (1989) scores to measure the ideologies of Supreme Court justices.[10] To determine the ideological makeup of a given Supreme Court, we calculate the mean ideology score for the justices on that Court. We subtract the mean of the Court that issued the overruling decision from the mean of the Court sitting at the time the lower court treats the decision to obtain a measure of change in the ideological composition of the Court. We then combine this measure with the direction of the overruling decision so that the findings may be interpreted consistently. We call this variable ***Change in Supreme Court Composition***.

We expect to find additional evidence of appeals court judges behaving in a self-interested manner. When the Supreme Court reverses a circuit court in overruling precedent, that circuit may be more reluctant to adopt the new prec-

[9] Two recent analyses found the use of this proxy to be defensible. Giles, Hettinger, and Peppers (1998) found that in civil liberties cases, it produced results similar to more involved measures. Pinello's (1999) meta-analysis concluded similarly: "Cumulating and synthesizing empirical findings on the link between judges' political party affiliation and their performance on the bench confirm conventional wisdom that party is a dependable measure of ideology in modern American courts" (16).

[10] In order to derive attitudinal measures from sources independent of votes, Segal and Cover (1989) analyzed the content of newspaper editorials that were published between the nomination and confirmation of each justice. These scores have been updated and backdated to include the nominees of Franklin Roosevelt through Clinton (Segal, Epstein, Cameron, and Spaeth 1995). These scores range from −1 (extremely conservative) to 1 (extremely liberal).

edent.[11] Conversely, when the Court affirms a circuit court in overruling precedent, that circuit should readily espouse the new precedent.[12] We explore each of these situations with dummy variables for ***Source Reversed*** **and** ***Source Affirmed***.

Identification of Courts of Appeals Cases

Tarr (1977) offers useful definitions of compliance and noncompliance that we employ to identify Courts of Appeals decisions for analysis. Compliance involves "proper application of standards enunciated by the Supreme Court in deciding all cases raising similar or related questions," while noncompliance "involves a failure to apply—or properly apply—those standards" (1977, 35). With these definitions in mind, we identified cases for analysis via *Shepard's United States Supreme Court Citations*.[13]

We identified all treatments in the Courts of Appeals of the Warren Court overruling decisions.[14] We coded a circuit court case that *Shepard's* indicates "followed" or "harmonized" a Supreme Court decision as *followed*. We coded a case that "limited" the Supreme Court decision as *not followed*. This utilization of *Shepard's* categorizations is justified in the compliance literature.

While we accepted *Shepard's* indications for approximately one-third of the citations in our study (those that "followed," "harmonized," or "limited" an overruling decision), we did not rely solely on *Shepard's* for our coding. We examined all cases where a circuit court "questioned" or "criticized" an overruling decision as a court may question or criticize a precedent but still follow that precedent. We also read all circuit court decisions that followed the *overruled* decision and, in so doing, found several instances in which a circuit court ignored an overruling decision. We excluded cases that "explained" the precedent, as most of these "do not constitute substantive legal treatments of the cited case" (Spriggs and Hansford 2000, 338).

We also examined appeals court opinions that "distinguished" Supreme Court precedent. A common technique employed by lower court judges to avoid the application of a decision with which they disagree is distinguishing that precedent, emphasizing factual differences between the decision of the higher court and the case at bar (Baum 1978; Caminker 1994; Canon and Johnson 1999;

[11] Neighboring circuits may follow the reversed circuit's example and disregard the overruling due to their geographical proximity. Some studies have begun to examine this in the area of remands (e.g., Pacelle and Baum 1992), but widespread attention has not been given to this possibility.

[12] Note that this is an instance where a lower court appears to have anticipated an alteration in precedent. Interestingly, in two of its overruling decisions, the Warren Court affirmed the decisions of circuit courts. See Reddick and Benesh (2000) for a discussion of this phenomenon.

[13] For a discussion of potential problems with using *Shepard's*, see http://www.uwm.edu/~sbenesh.html.

[14] Our analysis, then, starts with the first treatment of *Brown* in 1954 (*Brown v. Board of Education*, 347 U.S. 483) and ends in 1986, arguably late enough to afford each circuit the opportunity to treat even the last of the Warren Court overrulings (*Benton v. Maryland*, 395 U.S. 784, decided in 1969).

Douglas 1949; Songer and Sheehan 1990). This behavior may be fairly characterized as an avoidance of precedent. However, Spriggs and Hansford's (2000) assessment indicates that *Shepard's* "distinguished" category is quite heterogenous. We therefore read all of the distinguishing decisions to determine whether the circuit courts were relying upon minor factual differences to avoid applying precedent or whether significant factual differences actually precluded the application of the precedent. We coded the distinguishing circuit court cases as having "followed" or "not followed" an overruling decision, or, when factual differences made the application of precedent implausible, we eliminated the citation from the analysis.[15]

Methodology: Event History Analysis

We employ an innovative research design by estimating an event history model of the circuit court responses to Supreme Court decisions that overrule precedent. In particular, we model the number of decisions a circuit court makes before it follows an overruling decision. Event history models differ from event count models in an important respect. While an event count model simply captures the number of events that occur, an event history model is a record of these events, incorporating changes over time in the values of independent variables that may influence event occurrence. Here, we account for changes across decisions in the ideological composition of the appellate panels applying an overruling decision and changes in the ideological composition of the Supreme Court since the overruling decision was made. Thus, we examine not only compliance but also the speed with which the circuits comply.[16]

The fundamental dependent variable in an event history model is the hazard rate (Allison 1984), or the probability that an event will occur at a particular time to a particular subject, given that the event has not occurred until that time. In our analysis, the hazard rate is the probability that a circuit court will follow an overruling decision in a particular case, given that it has not yet

[15] Our coding rules, along with inter-coder reliability scores, can be obtained via the Internet at: http://www.uwm/~sbenesh.html.

[16] This is an unconventional application of the event history method given that we are not measuring the amount of time until something occurs but, rather, the number of events until something occurs. However, we argue that this method is appropriate since what we examine are exposures, or opportunities for compliance, and in this context, treating the case as an exposure is more practical than treating a time unit, like year or month, as the exposure. The latter would penalize circuits simply because they had not yet had the opportunity to hear a case in which a particular Supreme Court precedent is relevant. Using a time variable as the event history mechanism, we would not be explicitly measuring compliance but rather a combination of compliance and agenda composition. Instead, we rely on the existence of a relevant case as the exposure, treating circuits as noncompliant only when they avoid Supreme Court precedents in cases where the precedents are relevant. As Alt, King, and Signorino (forthcoming) point out, the underlying data generating processes for binary, event count, and event history data are essentially the same. It follows, then, that using an event variable to denote a time-based or duration variable is defensible.

TABLE 1

Description of Event History Data

Decision Count	Circuits Treating Overruling Decisions	Circuits Following Overruling Decisions	Censored Circuits
1	267	168	99
2	77	37	40
3	34	9	25
4	24	7	17
5	16	3	13
6	13	3	10
7	10	5	5
8	5	1	4
9	4	1	3
10	2	1	1
11	1	0	1
12	1	0	1
Mean Exit Time = 1.698	$N = 454$	$N = 235$	

followed the decision. Three general types of hazard rates may be hypothesized: an increasing hazard, where the probability that a particular event will occur increases as the number of events increases; a decreasing hazard, where the probability that a particular event will occur decreases as the number of events increases; or a constant hazard that is unaffected by time.

Tables 1 and 2 and a graph of the hazard function provided in Figure 1 give us insight into the form of our hazard rate, indicating that it is increasing. In other words, as a circuit hears more cases in which it is asked to apply an overruling decision, the probability that it will follow the decision increases.[17] Based upon this information, we modeled the hazard rate as a Weibull distribution,[18] in which

$$h(t) = h_0(t)\exp(x\beta)$$

[17] "Analysis time" in the figure refers to the number of cases a circuit hears until it follows Supreme Court precedent. The Y axis denotes the hazard rate. This hazard rate is estimated using the Nelson-Aalen estimate easily accessible in STATA, which, while an imperfect estimate of the hazard rate, demonstrates the increasing nature of the hazard rate.

[18] The Weibull distribution is used with increasing hazard rates while the exponential, a more familiar distribution, is used when the hazard rate is demonstrably flat or constant. The distribution has a shape and scale parameter (b and c) and its mean is defined in terms of those parameters and the gamma distribution. See Evans, Hastings, and Peacock (1993) for more information.

TABLE 2

Decision Counts by Circuit

Decisions	1	2	3	4	5	6	7	8	9	10	DC	Total
1	15	30	24	18	29	26	28	27	32	23	15	267
2	5	9	6	6	6	8	10	6	10	6	5	77
3	2	4	4	3	4	3	3	2	5	3	1	34
4	2	3	2	1	3	2	1	2	4	3	1	24
5	2	1	1	0	2	1	1	2	2	3	1	16
6	1	1	1	0	1	1	1	2	2	3	0	13
7	1	0	0	0	1	1	1	2	2	2	0	10
8	1	0	0	0	0	0	0	1	2	1	0	5
9	1	0	0	0	0	0	0	1	2	0	0	4
10	0	0	0	0	0	0	0	1	1	0	0	2
11	0	0	0	0	0	0	0	1	0	0	0	1
12	0	0	0	0	0	0	0	1	0	0	0	1
Total	30	48	38	28	46	42	45	48	62	44	23	454

where $h_0(t) = p(t)^{p-1}$, and $h(t)$ is the overall hazard rate, $h_0(t)$ is the baseline hazard rate, p is the shape parameter, and x is the set of independent variables.[19]

Our data include 454 decisions in which a circuit court treated one of the 43 overruling decisions of the Warren Court. We set up the data so that a circuit first treated an overruling decision at t_0. Subsequent treatments of that decision occurred at $t_1, t_2, \ldots, t_n$. A circuit exits the analysis when it "follows" the over-

[19]The most common specification of the hazard rate is the Cox proportional hazards model, where the hazard rate is a function of a set of independent variables, both constant and time-varying, and a "baseline" hazard rate, representing its underlying behavior. The proportional hazards model is so called because for any two subjects at any point in time, the ratio of their hazards is a constant. In mathematical form, the hazard rate is represented as

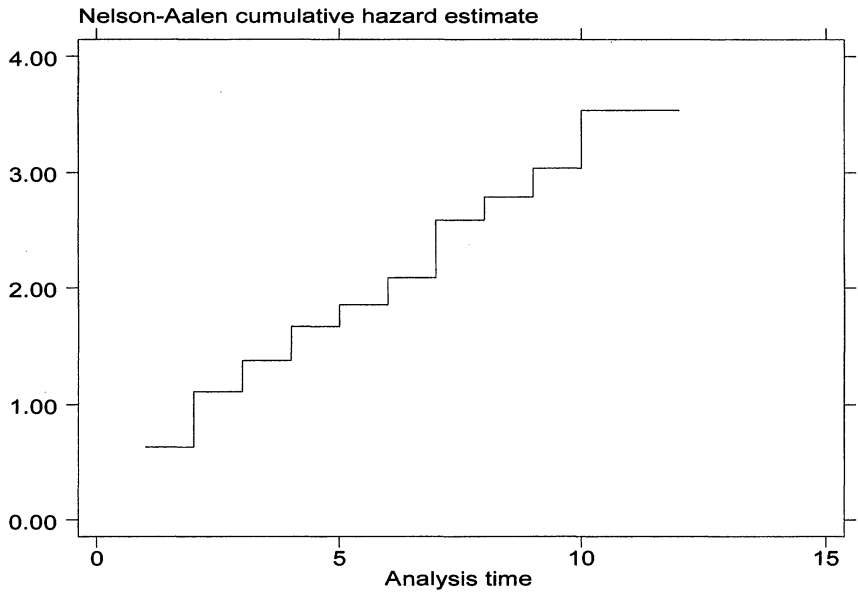
$$h(t) = h_0(t)(\exp) - x\beta$$

where $h(t)$ is the overall hazard rate, $h_0(t)$ is the baseline hazard rate, and x is the set of independent variables.

The appeal of the proportional hazards model results from the fact that it may be estimated via partial likelihood, a semiparametric technique that does not require specification of the underlying form of the hazard rate. We recognize that the models we estimate here are continuous-time models and that our data are discrete. However, in practice, even continuous-time data are measured in discrete units (Allison 1984). With the partial likelihood technique, observations are ordered from shortest to longest duration, and the values of the independent variables for each observation are compared with those for observations that outlasted it (Warwick 1992). In the absence of information about the baseline hazard, the order of the durations provides information about the unknown coefficients (Kiefer 1988). However, estimation is problematic for data containing many "ties," or events of the same duration. As Table 1 shows, our data contain 168 instances where the Courts of Appeals followed an overruling decision in the first case where they treated the decision. Thus, the partial likelihood method is inappropriate.

FIGURE 1

Graph of the Hazard for Compliance



ruling decision. If $S(t) = \exp(-\int_0^t h(u)du)$, the corresponding survivor function, then the likelihood of a circuit following an overruling decision at $t_1(\delta = 1)$ or being censored[20] $(\delta = 0)$ is $[S(t_1)/S(t_0)]h(t_1)^{\delta}$. The log-likelihood function for subjects observed from t_0 to t_1, then, is

$$\ln L = \Sigma \ln S(t_1) - \ln S(t_0) + \delta \ln h(t_1)$$

This likelihood function is maximized for $-\beta/p$ and $\ln p$. We estimated the Weibull model with robust standard errors to correct for correlated errors among the sometimes multiple decisions made in each circuit that treats a given overruling decision (Lin and Wei 1989).

Findings: The Weibull Estimation

The results of the Weibull model are presented in Table 3. The parameter p describes the form of the hazard rate over time, controlling for the values of the

[20] Here censoring means that the circuit has not yet followed the overruling decision. A key advantage of this type of analysis is that it allows censored observations, or observations for which the event of interest does not occur during the period under study, to be included in the analysis. Lower court circuits that still have not followed one or more of the overruling decisions are thus included in our analysis.

TABLE 3

Results of the Event History Estimation

Explanatory Variable	Coefficient	Robust Standard Error	Hazard Ratio	Robust Standard Error	p
Unanimous	0.389*	0.162	1.475	0.239	0.017
Minimum Winning Coalition	−0.343	0.286	0.709	0.203	0.230
Age of Overruled Precedent	0.009**	0.003	1.009	0.003	0.009
Doctrinal Modification	−0.110	0.378	0.896	0.338	0.770
Complexity	0.226**	0.085	1.253	0.106	0.008
Salient Overruled Precedent	0.375	0.203	1.455	0.296	0.065
Salient Overruling Precedent	−0.273	0.178	0.761	0.135	0.125
Criminal Procedure	−0.515**	0.172	0.597	0.103	0.003
Ideological Consistency	−0.037	0.214	0.964	0.206	0.862
Change in Supreme Court Composition	0.630**	0.219	1.877	0.410	0.004
Source Affirmed	1.003**	0.255	2.728	0.695	0.000
Source Reversed	−0.383	0.324	0.682	0.221	0.237
_Constant	−1.119	0.273			
$\ln p$	0.503	0.053			0.000
p	1.653				
$1/p$	0.605				

*$p < 0.05$
**$p < 0.01$
Number of subjects = 268 Log-likelihood = −265.800
Number of failures = 235 $\chi^2(12) = 134.23$
Time at risk = 454 $p > \chi^2 = 0.000$

explanatory variables, so that p is the baseline hazard of a circuit following an overruling decision. Since $p > 1$ (statistically significantly), our expectation that the hazard rate is increasing is confirmed. We present our results both in coefficients and hazard ratios, the exponentiated coefficients.

Supreme Court Case Characteristics

We find that both Supreme Court case characteristics and circuit-specific characteristics matter in the decision to adopt a Supreme Court overruling decision. ***Age of Overruled Precedent*** is significantly and positively related to the probability that the lower court will follow the overruling decision. That is, overrulings of older precedents are more quickly complied with than are overrulings of younger precedents. It appears that those who posit a legitimacy problem in overturning recent precedents are correct in asserting that lower courts are more deferential to alterations of older precedents (Brenner and Spaeth 1995).

The level of consensus on the Court is also important. Indeed, unanimity increases the hazard rate for compliance by 47.5%. This variable seems to tap into considerations of the authority and legitimacy of Supreme Court pronouncements, which in turn seem to affect lower court compliance. It is indeed the case, as the Court is sometimes wont to bemoan, that dissension minimizes the impact of its decisions (Woodward and Armstrong 1979).

In addition, the more legal provisions and additional issues a case involves—i.e., the more complex the case is—the more quickly lower court judges will favorably apply the case. For each additional legal provision or issue under consideration, the hazard rate for lower court compliance is increased by 25.3%. Perhaps lower courts take more care in understanding and applying complex decisions, or perhaps these cases are easier to comply with.

Issues matter not only in their sheer numbers but also in their substance. The Courts of Appeals were more reluctant to comply with new criminal procedure precedents than they were precedents in other areas. The hazard rate for compliance is decreased by 40.3% in criminal procedure cases. It is not surprising that these controversial Warren Court decisions met with some resistance in the lower courts.

Finally, there is some evidence that the circuit courts more readily espouse alterations in precedent when the abandoned precedent had important policy implications. When a landmark decision is overruled, the hazard rate for compliance with the overruling decision increases 45.5%. Perhaps the overruling of a landmark precedent comes quickly to the attention of the lower courts, contributing to more prompt compliance. However, we cannot say with confidence that there is any relationship between the salience of an overruling precedent and lower court responses to the precedent. In fact, there is some evidence that such a relationship, if it exists, is negative.

We examined other characteristics of the overruling precedents that were not significantly related to the compliance decision. Subsequent modifications of Supreme Court decisions by either the Court or Congress do not seem to diminish compliance, although the sign of the coefficient suggests a negative relationship. Also, although one of our measures of Supreme Court consensus—***Unanimous***—was related to lower court compliance, a second—***Minimum Winning Coalition***—was not.

Circuit and Judge Characteristics

Finally, we examined circuit- and judge-specific characteristics that may bear upon compliance. We find, as Table 3 shows, that a circuit that is affirmed as the Supreme Court overrules precedent acts swiftly in espousing the new precedent. The hazard rate for compliance for affirmed circuits increases by 69.5%. That a circuit is reversed in overruling, however, does not make that circuit significantly less likely to comply with the decision. Interestingly, ***Ideological Consistency*** between the new decision and the circuit panel also appears not to

TABLE 4

Predicted Counts: Number of Decisions Before a Circuit Court Follows an Overruling Decision

Baseline		1.871
Unanimous		1.479
Age of Overruled Precedent	1 Year	2.102
	84 Years	1.386
Complexity (Number of Legal Provisions and Multiple Issues)	1	2.066
	6	1.041
Landmark Overruling Decision		1.491
Non-Criminal Procedure Case		1.370
Change in Supreme Court Composition	0.86	1.226
	−0.86	2.362
Source Affirmed		1.012

matter in compliance. Lower court judges do not appear to base their compliance decisions solely on their own policy goals.

Ideology is a factor in these circuit court decisions though, but only with respect to the Supreme Court. Indeed, ***Change in Supreme Court Composition*** is positively and significantly related to circuit court compliance, altering the likelihood of compliance by 87.7%. The circuit courts are more likely to follow an overruling decision when the Supreme Court has become more predisposed ideologically toward that precedent. When the High Court moves away ideologically from an overruling decision, compliance becomes less likely. The Courts of Appeals appear to gauge the High Court's reaction to an unfavorable application of precedent and to base their decision to comply on that assessment.

Even with these significant influences, though, most circuits do not wait to adopt the overruling decision; they do so in the second case in which it is applicable. Tables 1 and 2 show the infrequency of any circuit waiting longer than one decision before complying with the Supreme Court's overruling decision,[21] and Table 4 demonstrates that changes in the independent variables only marginally increase or decrease the predicted number of cases a circuit court will hear before espousing a new precedent.

Discussion

Ideology appears to influence lower court compliance with Supreme Court overrulings, but that influence is not straightforward. Lower courts are not only asking the question, "Do I agree with this policy?" but also, "The Supreme

[21] Do note the existence of slight differences among the circuits. For example, the First, Eighth, and Ninth circuits seemingly wait longer to comply than the others, and the Fourth and D.C. circuits comply particularly quickly.

Court has overruled itself. Will it continue to adhere to this new position even now, given changes in its ideological makeup?" This calculation may speak to a more utilitarian notion of survival as well: "Will the Court as it sits now overrule me if I decide contrary to the overruling decision of a former Court, or has it changed enough that an adverse decision would be safe?" As we have discussed, this fear of reversal is so often cited that perhaps it does enhance compliance. It is entirely reasonable that our change in composition measure is tapping that dimension of lower court decision making.

However, and perhaps more important than ideological considerations, we find that certain characteristics of the Supreme Court's decision either induce or inhibit compliance. Indeed, unanimity, complexity, issue area, and age of the overruled decision all matter to the lower courts. All precedents are not created equally when it comes to lower court implementation. There is some selectivity regarding the precedents with which the lower courts decide to comply.

Overall, we have shown that lower court compliance can be studied accurately within an event history framework and that in studying circuit court responses to Supreme Court alterations of its own precedents, one comes to some conclusions that contradict conventional wisdom and past research. These judges are a complex set of actors. Not surprisingly, their decision to comply with a difficult set of cases is multifaceted as well.

Manuscript submitted 23 October 2000
Final manuscript received 1 August 2001

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