The Institutional Basis of the Attitudinal Model of Judicial Voting Behavior

Building upon the earlier attitudinal models introduced by Pritchett (1948), Schubert (1965), and Rohde and Spaeth (1976), Segal and Spaeth (1993) offered their own attitudinal model to explain judicial decision making on the United States Supreme Court. Unlike the Legal Model, which casts case facts in light of the Constitution, statutes, and precedent, their Attitudinal Model holds that justices make legal decisions based on their own “ideological attitudes and values” (Segal and Spaeth 1993, 73) without the constraints of law and precedent. Notwithstanding recent controversy, the Attitudinal Model is now the dominant paradigm among scholars who engage in empirical research on the Supreme Court. As one review of the state of knowledge on judicial behavior stated, "in scholarship on the Supreme Court ... the view that policy considerations are dominant over legal considerations has been taken by the most prominent work" (Baum 1997, 22). Another assessment echoes this view by concluding that, "the attitudinal model's systematic empirical shattering of the myth of mechanical jurisprudence permeates virtually all our work on judges and courts today" (Lawrence 1994, 3). Even critics of Segal and Spaeth concede that while judicial attitudes may not tell the whole story of judicial decision making, "empirical scholarship has now firmly established that the ideological values ... of Supreme Court justices have a profound impact on their decisions" (Songer and Lindquist 1996, 1049).

Nevertheless, the idea that policy preferences of justices provide a complete explanation of voting behavior in the Supreme Court is heavily debated. Knight and Epstein (1996) find evidence of a norm favoring respect for precedent that affects the nature and substance of the legal rules established by the Court. Epstein and Knight (1998) further argue that justices often refrain from voting their sincere policy preferences as part of a strategic plan to advance those preferences in the long run, taking into account the probable response of other important decision makers. Brenner and Stier (1996) find evidence that precedent, rather than policy preferences often sway center justices whenever the two collide. Similarly, Songer and Lindquist (1996) find a constraining influence of precedent in a
substantial minority of the votes of the justices. Even with these criticisms, the Attitudinal Model remains the mainstream view of decision making on the Supreme Court.

In stark contrast, studies of other American appellate courts suggest that below the Supreme Court, judicial attitudes matter, but the expression of these ideological preferences is constrained by the law, as well as institutional and political contexts. Richardson and Vines (1970) argued that the decisions of federal district and appeals court judges were best conceptualized as the resultant of the conflicting demands placed upon the judges by the legal and the democratic subcultures. Subsequently, a large number of studies, including analyses of cases involving libel (Gruhl 1980), patents (Baum 1980), economic policy (Stidham and Carp 1982), labor and antitrust (Songer 1987), obscenity cases (Songer and Haire 1992), search and seizure (Songer, Segal, and Cameron 1994), job discrimination (Songer, Davis, and Haire 1994), and review of agency decisions (Humphries and Songer 1999) reached similar conclusions about the joint influence of law and attitudinal preferences on the decisions of lower federal court judges. The results from those empirical analyses are re-enforced by the admissions of a number of sitting federal judges (see Coffin 1980; Howard 1981; Kozinski 1997; Posner 1997). Thus, there seems to be a consensus that in the lower federal courts, at least some judicial decisions are influenced by the policy preferences of the judges, but that the exercise of discretion to advance one’s policy preferences is constrained by statute, precedent, and other manifestations of the Legal Model. Even Segal and Spaeth are willing to stipulate that the "institutional rules and incentives that allow Supreme Court justices to engage in attitudinal decision making in votes on the merits do not apply in full to other courts" (1994, 11).

The contrast between these findings presents a question: If the policy preferences of Justices appear to be so crucial for decision making on the Supreme Court, why does “the law” continue to play such an important role in the decision making of other judges? Remarkably, there has been little research aimed at providing an answer to this puzzle. The answer to this paradox cannot be found in the courts’ personnel. Judges chosen to serve on the federal courts of appeals appear to be drawn from
essentially the same pool as Supreme Court justices, and examinations of personal attributes of the judges reveal few significant differences between the courts. In fact, the same people often serve on both courts.\footnote{Several scholars (e.g. Baum 1997; Rohde and Spaeth 1976; Segal and Spaeth 1993) suggest that the answer to this question involves a combination of institutional features thought to be unique to the Supreme Court. Specifically, Segal and Spaeth propose, but do not test, that members of the Supreme Court are free to vote their policy preferences without constraint from precedent because "they lack electoral or political accountability, ambition for higher office, and comprise a court of last resort that controls its own jurisdiction" (1993, 69). According to their Attitudinal Model, it is these institutional factors which set the Supreme Court apart and allow the individual justices to vote their policy preferences without regard for legal constraints (Rohde and Spaeth 1976; Segal and Spaeth 1993). Furthermore, Segal and Spaeth state (1993, 69) that the absence of these factors hinders the attitudinal voting by lower court judges. The implication of this view is that if other federal courts possessed these institutional features, judges would make their decisions based on their attitudes. Accordingly, the institutional features suggested to be critical to the existence of pure attitudinal voting are: 1) judicial independence; 2) lack of aspiration for higher office; 3) finality of decisions; and 4) docket control. However, concerning the last institutional feature, docket control, supporters of the Attitudinal Model send out ambiguous signals. The Attitudinal Model they argue is "a complete and adequate model of the Supreme Court's decisions on the merits" (Segal and Spaeth 1994, 11). Even when the plain meaning of the text of the law, or precedent, is clear, "they are easily avoided" (Segal and Spaeth 1996, 973). Implicit in this view is the notion that docket control, while it may make attitudinal voting easier, is not really a critical institutional underpinning of the Attitudinal Model; for, if precedent may be avoided even when precedent is "clear," attitudinally oriented judges will continue to vote their preferences even with a docket dominated by these "easy" cases. Thus, Segal and Spaeth appear to imply that only the first three institutional features (i.e., judicial independence;
lack of aspiration for higher office; and finality of decisions) are essential for attitudinal voting.

The present research provides a partial test of this "institutional thesis" by examining appellate court decision making in a genre of cases where the three institutional features unambiguously asserted to encourage attitudinally based voting exist. Specifically, this analysis focuses on decisions of the United States Courts of Appeals in tort diversity cases. As a practical matter, we argue that in these tort diversity cases, the judges enjoy a degree of judicial independence equivalent to Supreme Court Justices, their aspiration for higher office is irrelevant, and their decisions are final. If the three institutional characteristics identified by Segal and Spaeth are in fact necessary and sufficient for attitudinal voting to occur, one would anticipate no difference between courts of appeals decisions in tort diversity cases and general Supreme Court patterns of decision making. That is, the institutional thesis leads to the expectation that in diversity tort cases, appeals court judges will vote their policy preferences without constraint from precedent.

The analysis of tort diversity cases will make it possible to test two alternative hypotheses. First, if Segal and Spaeth’s institutionally based attitudinal model is correct, appeals court voting on the diversity tort cases examined below should be primarily a function of the ideological preferences of the judges. This expression of ideological voting should not be constrained to any significant extent by law because the institutional features that permit attitudinal voting on the Supreme Court are primarily present in these appeals court cases. Alternatively, the extent to which judges vote their attitudinal preferences may depend more on the nature of the choices presented in the cases they decide than on the institutional position of the court. As noted above, Segal and Spaeth send mixed signals on the extent to which docket control is necessary for attitudinal voting. If many of their cases present fact situations in which the applicable law is clear and widely accepted, the judges may feel the expression of their attitudinal preference is significantly constrained. Since existing scholarship suggests that the majority of cases on the courts of appeals are characterized by such clear and accepted law (Howard 1981; Songer 1982a; Richardson and Vines 1970), this alternative hypothesis leads to the prediction that appeals court
judges voting in these “easy” cases will still be significantly constrained by law and precedent.

Thus, in addition to testing the extent to which the set of institutional features thought to enhance attitudinal voting actually produce such results, this analysis may also shed some light on the continuing debate over the relative impact of attitudes versus law on the Supreme Court. If the reasons for the asserted dominance of attitudes offered by the proponents of the Attitudinal Model fail to be supported in this genre of cases, the findings may raise new questions about the adequacy of that model.

Institutional Features Applied to Tort Diversity Cases in the U.S. Courts of Appeals

Constituting approximately six percent of all published appeals court decisions, tort diversity cases in the United States Courts of Appeals provide a fertile field for an examination of the impact of institutional characteristics on judicial decision making. The Federal Judiciary Act of 1789 created diversity jurisdiction to protect out of state citizens from the biases inherent in the various state courts (Chemerinsky 1989). Instead of filing in state courts, civil law suits between citizens of different states meeting the criteria set forth in 28 USC Sec. 1332, could be brought in, or removed to, federal court, where an unbiased federal judge would apply the applicable state law. The Supreme Court’s landmark case in *Erie Railroad v. Tompkins* (304 US 64, 1938) eliminated a federal common law so that federal courts are now obligated to apply the laws of the state—including state common law—in which the cause of action occurred (Chemerinsky 1989). That is, by definition, diversity cases involve disputes based solely on state law. Federal judges are allowed to decide these cases only because it is anticipated that federal judges will not be partial to a citizen of any particular state. As stated by Judge Jerome Frank, when a state law is plain, the federal judge is reduced to a “ventriloquist’s dummy to the courts of some particular state” (*Richardson v. CIR*, 126 F.2d 562, 567 (2nd Cir. 1942)). Thus, the decree set forth in *Erie* requires deference by federal judges to state law in diversity cases. This work explores whether judges follow state laws, or pursue their policy preferences instead in light of the absence of institutional constraints in this genre of cases.
Generally, the United States Courts of Appeals do differ from the Supreme Court concerning the institutional features that distinguish the High Court from the rest of the judiciary. While technically independent, courts of appeals judges may make choices with an eye toward higher office (Baum 1997), thereby incorporating the preferences of other relevant actors into their decisions. Furthermore, fear of *en banc* review and Supreme Court reversal loom large in the minds of these federal judges. Melnick (1983) suggests that the primary reason that judges do not vote their personal preferences more often is the possibility of review by a higher court. Finally, appeals court judges typically maintain only partial control of their dockets. However, many of these institutional characteristics that set lower courts apart from the Supreme Court are not present in the United States Courts of Appeals when tort diversity cases are at issue. Except for the power to control completely their own docket, appeals court judges possess the same freedoms in deciding diversity cases as the nine Justices.

According to the institutional thesis, judicial independence is seen as crucial to the "free play" of personal policy preferences. Justices do not need to fear being thrown out of office at the next election because of unpopular decisions, and while impeachment is a theoretical possibility, its potential in practice "is negligible" (Rohde and Spaeth 1976, 72). In contrast, most other policy makers, including many state appellate court judges, must periodically face the voters. It is that electoral accountability which imposes a serious restraint on their ability to pursue policy preferences. We assert that in tort diversity cases, appeals court judges appear to have at least as much independence as Supreme Court justices. In terms of formal provisions regarding judicial independence, all federal judges are equal. Impeachment presumably holds no more threat for appeals court judges than it does for Supreme Court justices. Moreover, while Segal and Spaeth argue that both statutory reversal by Congress and reversal of constitutional decisions by amendment are sufficiently rare as to pose little practical constraint on Supreme Court decision making, these threats are even less likely to constrain appeals court judges in diversity cases. In fact, no diversity decision of the courts of appeals has ever been overturned by either of these mechanisms. Finally, the low level of national political salience of most appeals court diversity
decisions, especially compared to the politically charged agenda of the Supreme Court, means that it is unlikely that appeals court judges will come under frequent political attack from any quarter. In sum, like Supreme Court justices, appeals court judges deciding diversity cases enjoy judicial independence.

According to the institutional thesis, the lack of ambition for higher office also facilitates judges expressing their personal policy preferences more freely. Most officeholders desire an office more prestigious than the one they currently occupy, and such a desire will often constrain the expression of their preferences in order to curry favor with those who may influence their elevation. Yet, efforts to seek higher office “is most improbable for today's justices” because the Court is viewed as the pinnacle of a political career (Segal and Spaeth 1993, 71). In addition, since there is little division of labor among the justices, there is little reason to refrain from the expression of personal preferences in order to gain "promotion" within the Court (Rohde and Spaeth 1976, 73-74).

Similarly, it appears that ambition for higher office is not likely to affect appeals court judges’ decisions in tort diversity cases. While decisions in controversial cases regarding civil rights, abortion, and privacy may reflect a judge’s ambition for a loftier position, not a single study on Supreme Court selection has found that any decisions in tort diversity suits has figured into the highly politicized selection process of any judge nominated for the Supreme Court in the twentieth century. Thus, while it is possible that ambition for higher office may affect the way appeals court judges vote on high profile cases like abortion or civil rights, it is reasonable to assume that such ambition will have no effect on how they vote on diversity tort cases.

While judges on all courts are “honor bound” to follow the constitution and precedent, the most obvious enforcement mechanism for such a “legal obligation is the possibility of reversal. Segal and Spaeth argue that all other judges "are subject to courts superior to their own. Unless they wish to be reversed, they must follow the legal and policy pronouncements of higher courts" (1993, 71). The institutional thesis is that the absence of fear of reversal frees the Supreme Court justices to vote their personal preferences to a degree unmatched by judges on any other court.
In legal theory, appeals court judges are honor bound to apply state law without questioning the states’ interpretations. However, it is impossible for the states to review these judges’ application of the state laws. Although the courts of appeals can certify difficult questions of law to the states, such a choice is solely within the appeals court judges’ discretion. Therefore, appeals court judges are free from fear of reversal by state courts.

In addition to the absence of state court review, there is essentially no Supreme Court review of tort diversity cases. In fact, Perry (1991) cites diversity cases among those that the Court considers too frivolous to review. Lacking expertise on the 50 states’ numerous tort laws, and not typically confronted by either a conflict among the twelve circuits or any issue relating to national policy, the Justices tend to neglect tort diversity cases when filling their docket. For example, the Supreme Court did not review the courts of appeals’ interpretation of state law in any of the 697 tort diversity cases included in the present analysis. The failure of the Supreme Court to review even one of the 697 cases in our sample does not prove that the Court will never review a diversity tort decision. However, it suggests that the probability of review is so remote that it is highly unlikely to be considered by any appeals court judge. Review within the courts of appeals is also highly limited, for it is only upon rare occasions that tort cases receive en banc review. In none of the cases in our sample was the interpretation or application of state law overturned by the whole circuit sitting en banc. As a result, three judge panels of the courts of appeals are, for practical purposes, the final arbiters in tort diversity lawsuits. Thus, regarding finality of decisions, the courts of appeals in tort diversity have an institutional position that is similar to that of the Supreme Court.

Docket control in the Supreme Court may enhance attitudinal voting by eliminating "easy" cases; especially cases in which law and precedents are clear and authoritative. Thus, even a judge who is strongly inclined to follow precedent may vote in a manner consistent with the Attitudinal Model if confronted solely with "hard" cases in which precedent and statutory language are unclear. However, since Segal and Spaeth (1994, 11) say that clear precedent can be easily avoided by Supreme Court
justices, docket control may not be crucial to an institutional explanation of attitudinal voting. Given this ambiguity about the effect of docket control, we separately analyze appeals court decisions in “easy” and “hard” cases within our sample of tort diversity decisions.

In sum, since appeals court judges in diversity cases share at least the three institutional features that are thought to be most essential to give Supreme Court justices the freedom to vote their personal policy preferences, it might be expected that the Attitudinal Model is as applicable in courts of appeals tort diversity cases as it is in the High Court. If the Attitudinal Model prevails, then the Legal Model should not be relevant in this type of cases. The analysis below tests this proposition by examining the utility of both the Attitudinal and Legal Models in explaining voting behavior in United States Courts of Appeals tort diversity cases. By examining whether these judges are adhering to the mandates of diversity jurisdiction, i.e. the legal expectation that appeals court judges will be "bound" by state law, we explore the importance of institutional constraints for appellate court decision making.

**Testing the Implications of Institutional Features of Courts**

While Segal and Spaeth stress the importance of institutional features on judicial decision making, they have not yet tested what impact a variation of such properties would have on courts. In other words, their work is not clear as to whether all the institutional characteristics must exist to facilitate attitudinal voting, or if certain characteristics are more critical than others are. To begin teasing out the importance of these characteristics to the Attitudinal Model, we study courts of appeals judges’ votes in tort diversity cases for the period of 1960-1988. The data come from the Appeals Court Data Base.

The first step in testing the Attitudinal Model is to establish a measure of judicial preferences. Since no direct measure is available, nor would it be feasible to obtain one, past research has utilized compilations of judicial background characteristics, identification of appointing President, and previous
judicial voting records as measures of policy preferences. In the absence of a direct, independent measure of the appeals court judge’s attitudes towards tort policies, we created an indirect indicator of those preferences based on the ideology of their appointing president. While several alternate measures of the ideology of the appointing president exist, there is no consensus in the field as to the superiority of any one measure. Rather than arbitrarily choosing one of these admittedly imperfect measures, we attempted to create a superior measure by employing the existing measures in a principal components analysis.

We felt that principal components analysis was applicable because we have multiple measures of the same concept; judicial ideology as indicated by the ideology of the appointing president. Specifically, we ran principal components analysis on the following surrogate measures of judicial ideology: party of the judge; party of the appointing president; the Tate/Handberg (1991) measure of presidential ideology; the Segal, Howard and Hutz (1996) survey based rating of presidential economic liberalism; the Segal, Howard, and Hutz rating of presidential social liberalism; and an inflation adjusted presidential ADA score (Zupan 1992). We then extracted the first principal factor that we used to create factor scores for each of the individual appeals court judges. Each score is a composite of the variables that covers the maximum amount of variance of the set of variables. The scores are a linear combination of the data and the information contained in the basic structure of the data matrix (Weller and Romney 1990). While the analysis produces as many factors as variables, the factors extracted after the first principal were trivial. Therefore, we dropped these factors and utilized only the first principal factor to create the ideology scores used in our subsequent analysis (Gorsuch 1983). We adopted the principal components scores as our measure of judicial attitudes. We called this variable Judicial Liberalism since it measures the degree of each judges’ liberalism through the policy views of the appointing president.

Under the Legal Model, it is expected that the courts of appeals judges will apply the substantive
laws of the applicable state in accord with the holding in *Erie Railroad v. Tompkins* when deciding tort diversity cases. Therefore, judges should be looking to state constitutions, statues, and case law for guidance prior to handing down their final decisions. One of the problems that has long confronted empirical analyses of judicial behavior is the difficulty of obtaining an *objective* measure of the law, or precedent, that is most relevant for a given decision, since litigants on both sides of most cases present arguments asserting that precedent favors their position. Given the difficulty of creating such an objective measure, we have opted instead to create measures of the overall status of tort law that is operative in each state at a given time. While such measures will not capture perfectly which side is most advantaged by the law in a given case, if the legal model is relevant, the measures should be at least roughly correlated with the overall, or average, effects of law and precedent across the sample of cases analyzed.

Thus, in order to assess the impact of the Legal Model, we adopted two alternative measures of state law, which we believe reflect the degree of liberalism espoused by each state regarding numerous traditional tort policies. The first of these variables, called State Tort Law, consists of a compilation of leading tort doctrines that we believe represent the most important and highly litigated issues in modern civil liability law. This was accomplished through a linear combination where:

\[
\text{State Tort Law} = \text{Negligence per se} + \text{Strict liability} + \text{Right to privacy} + \text{Frivolous lawsuit penalties} + \text{Comparative negligence} + \text{Limits on recovery} + \text{Collateral Source rule}
\]

We felt that the seven tort policies demanded equal attention in this analysis, so we weighted them equally in the linear combination. We felt that the seven tort policies demanded equal attention in this analysis, so we weighted them equally in the linear combination. For each of our components, a score of 1 represents the most pro-defendant policy, and a score of 0 represents the most pro-plaintiff doctrines. Thus, larger values of this variable indicate that a state’s overall approach toward tort policy is pro-defendant in nature, while smaller values represent those states more inclined to draft laws designed to benefit plaintiffs. Because we coded the year of adoption for each doctrine for every state, our summary
indicator is a dynamic measure of state law at any given time during the 1960-1988 periods. The measure of tort law does not identify precisely which law is relevant in any given case; instead, it provides an *indicator* of the overall nature of tort law in each state at any given point in time. Therefore, if law does matter, this measure should capture the general trends of decisions rendered in these state tort cases.

The alternate measure we used to reflect each state’s degree of liberalism regarding tort policies is the postwar State Tort Innovation score for each state reported in the Canon & Baum study (1981). These scores rank each state in accordance with their degree of innovation concerning 23 pro-plaintiff tort law doctrines (Canon & Baum 1981). These rankings represent the cumulative tort law policy of the state for the 1945-1975-time period. Like State Tort Law, the Tort Innovation score provides only an *indicator* of the overall nature of tort law in each state at any given point in time. As a result, the model below which incorporates these two measures of state law does not provide a direct control for the specific statute or precedent that is applicable in a given case. Rather, these two variables tap only the general degree to which each state’s law tends to favor plaintiffs or defendants. While such measures are only rough indicators of the relevant law for a specific case, the differences among states measured by these variables should relate to general trends in decision making in different states if, and only if, judges are substantially constrained by state tort law.

Given that several studies have found that parties which possess superior material resources tend to experience greater success in trial court litigation (Galanter 1974), state supreme courts (Wheeler et al. 1987), and in the United States Courts of Appeals (Songer & Sheehan 1992), we created a control variable to test whether litigant’s resources impacted judicial decision making. By measuring the difference between defendants’ and plaintiffs’ resources, Songer & Sheehan (1992) arrived at a measure of litigant resource differences, which separated the “haves” from the “have nots” in the courts of appeals. We adopted this measure as our Litigant Resources Difference variable.

We also included a control for the dominant political values of each state to insure that any
correlations discovered between state law and judicial decisions were not simply a function of state liberalism. An extensive literature has documented an association between the dominant values of the home state, or region of elites, and the political positions the elites take. Most of the studies have used region as a surrogate for common political culture or values. Although the utility of region has been demonstrated, the variable provides at best only a rough indicator of local opinions and values. In addition, region is not able to capture change over time in local opinions or moods. Recently, however, Berry, et.al. (1998) have created a measure of citizen ideology for each state for each year derived from an analysis of the voting behavior of the members of Congress from each state, in combination with an analysis of the partisan composition of state and national office holders from the state. Analyses reported by Berry, et.al. (1998) provide convincing evidence that this measure is both valid and highly reliable. We adopt this Citizen Ideology measure as a control for the dominant values of each state. The variable theoretically runs from zero (most conservative) to 100 (most liberal).\textsuperscript{19}

We examined the votes of all appeals court judges involved in each tort diversity case for the period in question. The vote of the individual judge in each case was our dependent variable. A score of 0 was given if the vote cast was pro-plaintiff, while a score of 1 was given for pro-defendant votes. Because our dependent variable is dichotomous and ordinary least squares regression is not appropriate, the parameters are estimated by logistic regression, a maximum likelihood estimate technique (Aldrich & Nelson 1984). This method produces parameter estimates for the model’s several independent variables in terms of each variable's contribution to the probability that the dependent variable falls into one of the designated categories (either voting for the plaintiff or the defendant). For each of the independent variables examined in this paper, a maximum likelihood estimate (MLE) is calculated along with its standard error. The MLE’s represent the change in the logistic function that occurs from one units change in each independent variable.

Findings
The results our model appear in Table 1. The variable measuring the degree of judicial liberalism significantly relates to judicial voting.\textsuperscript{20} These results, which show that an appeals court judge’s degree of economic liberalism is positively related to judicial voting, lend support to the hypothesis that attitudes do impact upon decision making in courts of appeals tort diversity cases.

\textbf{Table 1 here}

The model also reveals the significance of both of our two alternate measures of state law. These two measures, which are overall indicators of state tort law, appear to tap somewhat different aspects of state law. The State Tort Law variable, in which higher values represent states having a pro-defendant predilection, positively relates to the dependent variable. Alternatively, the Tort Innovation variable, where higher values represent early adopters of progressive pro-plaintiff tort doctrines, negatively relates to the dependent variable. The signs of these coefficients reflect the scaling, and as predicted, run in the hypothesized direction. The results of this estimation of our model suggest that attitudes alone are not enough to explain judicial voting behavior in tort cases on the United States Courts of Appeals. The significance of both state law measures suggests that legal constraints do have a positive effect on the appeals court judges’ decision making process in courts of appeals tort diversity cases, in spite of the institutional similarities these judicial bodies share with the United States Supreme Court.\textsuperscript{21}

Both of the control variables included in the model perform as predicted. The coefficient of our Litigant Resources Difference variable indicates that while the nature of litigants’ resources affects judicial decision making, the addition of this control variable does not negate the effects of either the attitudinal or legal variables. Similarly, the Citizen Ideology variable was found to be both strong and statistically significant. Even with the inclusion of these additional controls, the data in our model support our hypothesis that attitudes alone cannot explain judicial outcomes in these diversity suits.

The coefficients in Table 1 show the change in the log of the odds ratio for a decision supporting a pro-defendant decision for a one-unit change in the values of the independent variables. Since these
coefficients are not readily interpretable, we compute values for the estimated probability of a pro-
defendant vote for selected values of key attitudinal and legal variables. These estimated probabilities
are presented in Table 2.

Table 2 here

As an illustration of the effect of differences in the values of the independent variables, we
present the estimated probabilities of a pro-defendant vote for liberal and conservative judges in states
with pro-defendant and pro-plaintiff tort laws. This comparison suggests that the effect of differences
in judicial attitudes on judicial votes is roughly the same as the effect of differences in state law.
Changing from a high to a low value on either variable alters the probability of a pro-defendant vote by
about eight percentage points. These results appear to be of roughly the same magnitude as the effects of
attitudinal and legal variables discovered in prior studies of appeals court voting in other issue areas
cited earlier. However, these effects of our measure of judges' attitudes appear to be substantially less
than the pronounced attitudinal effects typically discovered in studies of Supreme Court voting.

A Validity Check for the Measure of State Law

Tort cases in general provide a convenient vehicle for testing the relative impact of legal and
attitudinal variables in the courts of appeals because the courts decide disputes involving similar injuries,
but with different sets of law. Lower federal courts decide claims brought by plaintiffs under federal tort
statutes, as well as those analyzed above that are brought under state tort law and reach the federal courts
through diversity jurisdiction. From the perspective the Attitudinal Model, appeals court judges should
apply essentially the same standards as they decide how to vote in each type of case, because the issues
in the two types of cases are very similar and the law is irrelevant. Most often, in both sets of cases, an
individual who is an economic underdog is suing a corporation or government for injuries that the
individual suffered due to the alleged negligent acts of the stronger party. Thus, the prediction from the
attitudinal model in both types of tort cases is that judges with liberal ideologies will support the
plaintiff, and judges with conservative ideologies will support the defendant.

Consequently, a "natural experiment" is possible by the existence of these two sets of cases that have identical attitudinal perspectives, but governed by different laws. The prediction from the Attitudinal Model is that in the two sets of cases, the impact of judicial ideology should be strong and essentially of equal magnitude while the measures of law should have no impact in either set of cases. Alternatively, the prediction from the Legal Model is that the impact of judicial ideology should be constrained by the measures of state law in the diversity cases, but these legal variables should have no significant relationship to judicial decisions in the federal law tort cases. If the state tort law variables are related to judicial decisions in the federal law cases it will be an indicator that those variables are tapping something other than state law. To test these alternative predictions, we re-ran the model from Table 1 on all of the federal tort cases decided in the same time period that are included in the Appeals Court Database. The results of the analysis are presented in Table 3.

The results provide additional support for the conclusion that our two measures of state tort law are in fact measuring state law, and that such law constrains judges in tort diversity cases. As expected, the measure of judicial policy preferences remains statistically significant in the analysis of federal tort cases. However, neither measure of state law relates significantly to judicial votes. Of course, one would not expect state law to affect the decisions of judges deciding cases brought under federal law. However, the confirmation of this expectation, in combination with the significance of these same measures of state law in diversity cases makes it more plausible to conclude that our operational measures do in fact capture an important component of state law. Therefore, state law does constrain appeals court judges in those cases in which the Legal Model suggests that such law should be relevant.

The Effects of State Law in Easy and Hard Cases

An important institutional characteristic that does appear to distinguish the courts of appeals in
tort diversity cases from the Supreme is the extent of docket control. The implication of this difference is that the proportion of "hard" cases that lack clear precedent is substantially smaller in the courts of appeals. However, among these "hard" tort diversity cases in the courts of appeals, the other institutional characteristics thought to produce attitudinal voting in the Supreme Courts should all be present. For these "hard" cases, an institutional theory of attitudinal voting leads to the prediction that appeals court judges should behave in a manner that is similar to the actual practice of Supreme Court justices. That is, in these “hard” cases where there is no clear, unambiguous precedent, judicial decisions should be strongly related to the ideologies of the judges and should not be influenced by our measures of state law.

In contrast, among the "easy" tort diversity cases in the courts of appeals - cases characterized by clear statutory law and/or precedent - the Legal Model leads to the prediction that judges' decisions will be highly influenced by precedent; thus, there should be a strong relationship between our variables measuring state tort law and the pattern of judicial decisions. For these “easy” cases, it is reasonable to speculate that appeals court judges should behave in a manner that would be similar to the way that Supreme Court justices would be expected to behave if they had an agenda comprised primarily of "easy" cases.

Unfortunately, there is no objective way to identify those cases that are "hard" and those that are "easy." However, an approximation of which cases are "hard" versus "easy" that has been used in many empirical analyses since the quantitative analysis of courts began with Pritchett (1948) is to assume that all non-unanimous decisions are "hard" cases. While it may not be reasonable to assume that all unanimous cases are "easy" in the sense of having clear law and precedent, it can at least be assumed that the proportion of “easy” cases among unanimous decisions is relatively high. Thus, in order to gain further insight on the effect of docket control for enhancing attitudinal voting, we re-ran our model of tort diversity decisions on two sub-samples of our original sample. First, the analysis was run on all non-unanimous decisions and then the analysis was re-run on the remaining unanimous decisions. The
results are displayed in Table 4.

**Table 4 here**

The results strongly reinforce the conclusion that docket control is important for attitudinal voting. In the sample of cases with dissent, the effect of judicial policy preferences is substantially stronger than the effect of attitudes in the overall sample. Moreover, the relationship remains statistically significant at the .001 level in spite of the much smaller number of cases in the analysis. Additionally, neither measure of state law is significant in this sample of "hard" cases. In fact, the directionality of the coefficients of both legal variables are opposite of what would be predicted from the Legal Model.

A different picture emerges from the analysis of the unanimous decisions. Although the coefficient for the judicial liberalism measure is in the predicted direction, it does not reach conventional levels of statistical significance. However, both of the state law variables have coefficients that are in the predicted direction and are statistically significant.

**Discussion**

While the specific focus of analysis above was decision making in tort diversity cases in the courts of appeals, the larger question explored was whether the institutional features of courts that Segal and Spaeth identify as crucial for the Attitudinal Model have their predicted effects. More specifically, conflicting theories of judicial decision making led to two rival hypotheses. If Segal and Spaeth’s assertions about the institutional bases of attitudinal voting were correct, then one would expect appeals court votes on the tort diversity cases to be driven by the judges’ ideologies alone. Alternatively, if judges only vote their preferences in the absence of clear, widely accepted law, then the votes of appeals court judges in these cases should reflect significant constraint from the measures of state law. The findings indicate that in courts of appeals tort diversity cases, in spite of the institutional characteristics that Segal and Spaeth suggest should support attitudinal voting, judges’ decisions are constrained by law.
The results raise questions about the adequacy of the institutional explanation for attitudinal voting.

Prior analyses of the importance of the Legal Model for lower court decision making often stressed the role that the possibility of reversal played in restraining the expression of judges’ policy preferences. However, the tort diversity cases examined here are unique due to the nearly total absence of any chance that the decisions of the appeals court panel will be reversed, or altered, by any other legal or political actors. According to the Legal Model, appeals court judges are bound to follow state law and the precedents of the state high court interpreting that law. Appeals court judges are legally bound to follow state law, but there do not appear to be any sanctions available to enforce that obligation. Decisions of the courts of appeals are not legally subject to review by any state court. While either the Supreme Court or the circuit acting en banc might, in theory, reverse a panel decision, in practice the chance of such a reversal is negligible. Yet, in spite of this absence of any threat of reversal, state law appears to have a substantial effect on the decisions of appeals court judges. Moreover, this deference to the law appeared in spite of the existence of institutional characteristics believed to facilitate attitudinal voting.

The only institutional characteristic postulated by prior studies to support attitudinal voting that was not present in these cases was complete docket control. The reduced docket control by the judges on the courts of appeals presumably means that many of the tort diversity cases included in our sample were characterized by relatively clear law and precedent (Howard 1981; Songer 1982a). From the perspective of Segal and Spaeth (1993), at least on the Supreme Court, even such clear precedent could be "easily avoided." The implication of this view is presumably that if appeals court judges possessed political independence, had no ambition for higher office, and had no fear of review, they could also avoid even clear precedent. However, our findings suggest that appeals court judges appear to defer to clearly defined law and precedent. This conclusion was supported by the fact that only in the sample of non-unanimous cases, which are speculated not to have clear law, were the measures of state law unrelated to judicial votes.
Even Supreme Court Justices, like their brethren below, may be substantially constrained by legal rules whenever the law is clear. But since docket control allows the Supreme Court, unlike the courts of appeals, to focus on the “hard” cases in which the law is unclear, the average degree of constraint from the law that is “objectively” present in cases heard by the Supreme Court is lower than it is in other courts. This is quite different from saying that the Legal Model is “meaningless” as Segal and Spaeth (1993, 62) assert. Instead, our results suggest that the Legal Model may have similar effects in all appellate courts in this country. While somewhat speculative since no data on the Supreme Court was directly examined, the implications of these findings are that clear precedent may not be "easily avoided" as the Attitudinalists claim, but instead may often substantially constrain the decisions of judges; even those on the highest court.

Some may question the applicability of the findings on tort diversity cases for an understanding of Supreme Court decision making on the grounds that the intensity of judges' attitudinal preferences about tort outcomes is so low that they are more willing to follow the dictates of law even when the law appears to support an outcome different from their preferences. Given the nature of our data, we have no direct information on the intensity of the preferences of any of the judges whose votes we analyzed. Our guess is that the reduced impact of attitudes is only partially a function of lower attitudinal intensity, but we do not believe that there is any persuasive evidence that differences in intensity are likely to account for major differences in the behavior of these appeals court judges and the typical behavior of Supreme Court justices in other cases.26

Moreover, the magnitude of the effects of judicial ideology in tort cases are similar to the effects discovered in appeals court voting in a variety of other issue areas. For example, appeals court judges appear to be no more likely to vote their ideological preferences in civil rights cases than in tort cases. In addition, tort cases frequently pit underdogs against large corporate interests in ways that are likely to resonate with the ideological orientations of most political elites. Frequently they involve the potential transfer of substantial sums of money. In concrete terms, they often impact the
lives of the litigants to a greater extent than is true of many civil liberties cases. Like most criminal
decisions in the courts of appeals, there are often no general policy questions at issue. Yet, it has been
repeatedly demonstrated in analyses of both the federal district and appeals courts that the values of
judges influence their decisions in criminal cases. Therefore, while the intensity with which
ideological beliefs are held may have some influence on the way judges, at all levels, balance the
sometimes competing pushes and pulls from the legal constraints and their own preferences, there is
no hard evidence at this point that suggests that concerns about intensity make comparisons between
levels of courts illegitimate.

From a broader perspective, the findings illustrate the importance of empirical testing of the
effects of institutions, especially the importance of agenda control for the pursuit of one’s policy
preferences. While it is widely believed that institutional factors may critically structure judicial
behavior, our understanding of the importance of institutions has been retarded by the concentration of
much of our empirical research on a single court. Comparative analyses of multiple courts are
imperative if we are to advance our understanding of the institutional basis of attitudinal voting, or
whether there are institutional bases of any generally accepted characteristics of the Supreme Court, or
of all courts in general. At a more basic level, we have little solid empirical basis on which to describe
what, if anything, characterizes courts per se that differentiates them from other government bodies.
More comparative analyses of courts with variations in institutional structures may eventually shed more
light on what distinguishes courts *qua* courts.
APPENDIX A

We borrowed three of these indicators (negligence per se, strict liability in tort and the right to privacy as a tort) from the 1981 Canon and Baum article that analyzed the diffusion of numerous plaintiff oriented tort doctrines across the numerous state courts (Canon and Baum 1981). We would like to thank Larry Baum for graciously sharing his data collection regarding the dates of adoption for these tort doctrines. These three particular doctrines were chosen because they represent, what we believe, to be the most important of the Canon and Baum indicators of pro-plaintiff tort laws.

Negligence per se represents, perhaps, one of the most pro-plaintiff causes of action available, and imposes liability for the mere violation of the state’s statute (local traffic ordinances provide a good example of such liability).

The development of strict liability law, with a focus on dangerous products and situations, including food, drink, and other consumer goods, accounts for huge sums of payments awarded by state courts each year. This growing subset of tort law eases an injured plaintiff’s burden of proof in establishing “fault” on the part of the defendant.

The third component is whether or not a state has created a tort-based cause of action for the invasion of an individual’s privacy rights. These laws are designed to compensate individuals who have experienced an unwelcome intrusion into their private lives.

Since these were originally coded as pro-plaintiff measures, and our measure is pro-defendant, if any of these three tort doctrines existed in a particular state, the state was coded as “0”. If these plaintiff oriented doctrines had not been adopted by a state, a “1” was coded to indicate such failure to adopt (which was interpreted as pro-defendant). For states that adopted one of these doctrines during the period of our analysis, the component was coded as “0” for the years in which the doctrine was in effect, and “1” for other years. We updated the applicability of each of these doctrines for each state for the years subsequent to the collection of the data by Canon and Baum.

The next four components of our “State Tort Law” variable were derived from several important pro-defendant doctrines found in states. Data for the variables were systematically collected through a state-by-state search of all 50 states’ statutory laws regarding the applicable tort law doctrines. In the event that no statutory proclamation existed on a particular doctrine, or if previous legislation had undergone judicial modification, the relevant state case law was also examined and recorded. By undertaking a state by state analysis of tort based statutory and case law, we were able to construct liberalism scores for each of the following pro-defendant policies: penalties for frivolously filed law suits, comparative negligence, limits on plaintiff’s recovery, and the collateral source rule. These policies were chosen to exemplify state attempts to regulate bad faith practices and overcompensation by self-seeking plaintiffs and their attorneys (Bannon 1989).

The fourth component was based on the existence of state imposed punishment for frivolously filed lawsuits. For instance, many states have adopted rules similar to that of Rule 11 of the Federal Rules of Civil Procedure. Under the federal version of this policy, either legal counsel or pro se parties must sign all pleadings, motions, and other papers which form part of the official record. By so doing, this signature “constitutes a certificate…that the signer has read the pleading, motion, or other paper; that to the best of the signer’s knowledge, information, and belief formed after reasonable inquiry it is well grounded in fact and is warranted by existing law or a good faith argument…and that it is not interposed for any improper purpose…” (Rule 11, Federal Rules of Civil Procedure). Violations of such rule, and the numerous state interpretations, results in monetary sanctions imposed upon the transgressor. To maintain uniformity in coding, a value of “1” was assigned to states which adopted laws providing for penalties in the event that a frivolous lawsuit was filed. A value of “0” was coded if a state had not adopted this doctrine.
As opposed to the coding undertaken for assessing frivolously filed law suits, where it was ascertained simply whether or not a particular state had adopted a rule similar to that of Rule 11, coding for the remaining three policies was undertaken in a somewhat different manner. A five-point scale was created for states’ policies regarding comparative negligence, limits on recovery, and for collateral sources of monetary compensation. Since most states tend to systematically vary in the degree of liberalism in developing these tort doctrines (whether through case law or statutes) it was possible to evaluate these policies across the states in an ordinal fashion, ranging from the most pro-plaintiff oriented to the least. States exercising the most pro-plaintiff acceptance of the doctrine were given the code of “0”, while a score of “1” indicates the most extreme pro-defendant bent toward the relevant policy. Date of policy adoption as well as date of subsequent modification (if applicable to a state) were also verified and coded.

Comparative negligence is an important pro-defendant doctrine, adopted by many states and in numerous forms. Those states that have chosen to incorporate this policy into their body of civil law acknowledge that fault is oftentimes not an all-or-nothing proposition. Instead, the allocation of liability between both the defendant(s) and the plaintiff(s) in a final decision allows a particular state court to punish the wrongdoer in a tort case, but in a manner that more accurately reflects the actual degree of responsibility (e.g., under comparative negligence, if the defendant was 60% to blame for the accident and the plaintiff was 40% at fault, the defendant would only have to pay 60% of the cost of the resulting injury). The utilization of this policy among the states tends to vary in a systematic fashion, from those states that did not adopt some form of comparative negligence, to those more progressive states that allocate the burden between parties in a strict proportional manner. A state that had not incorporated this policy into their tort law was given a code of “0”, symbolizing the most pro-plaintiff policies. As states moved toward the most pro-defendant of comparative negligence policies, the coding of this component approached a value of “1”.

State doctrines related to limits on recovery (especially in the area of medical malpractice) and the collateral source of funding rule, both exemplify liability theory similar to that of the varying state comparative negligence doctrines. For example, many states now impose a dollar limit on the amount a plaintiff may recover for punitive damages, but the actual amounts vary widely among states. Thus, coding of these components of the “State Tort Law” variable were conducted in a similar schematic manner, with "0" representing the most pro-plaintiff policy and "1" the most pro-defendant policy on recovery limits and collateral source rules.
REFERENCES


*American Politics Quarterly* 20 no. 2: 146-168.


*Richardson v. CIR*, 126 F.2d 562 (2nd Cir. 1942).


THE INSTITUTIONAL BASIS OF THE ATTITUDINAL MODEL OF JUDICIAL VOTING BEHAVIOR

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ABSTRACT

The Institutional Basis of the Attitudinal Model

Proponents of the Attitudinal Model of the voting by Supreme Court justices have maintained that justices are more likely than judges on other appellate courts to vote their ideological preferences. Specifically, there are sets of institutional factors present only on the Supreme Court that permit, or encourage, the unrestrained expression of preferences. It is argued that Supreme Court justices are free to vote their preferences without constraint from precedent because of the following factors: lack of electoral or political accountability, absence of ambition for higher office, and being a court of last resort that controls its own docket. While this explanation of attitudinal voting is widely accepted, it has never been tested. To provide a first test of the asserted institutional foundations of attitudinal voting, the voting of United States Courts of Appeals judges in tort diversity cases are examined. In such cases, appeals court judges benefit from all of the institutional features thought to advance attitudinal voting, except complete docket control. In spite of benefiting from the institutional features that are claimed to support unconstrained attitudinal voting, the votes of the appeals court judges appear to be highly constrained by law and precedent.
Table 1
A Model of Pro-Defendant Votes in Tort Diversity Cases

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>MLE</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.2484</td>
<td>0.2170</td>
</tr>
<tr>
<td>Judicial Liberalism</td>
<td>-0.0442*</td>
<td>0.0269</td>
</tr>
<tr>
<td>State Tort Law</td>
<td>0.1010*</td>
<td>0.0578</td>
</tr>
<tr>
<td>State Tort Innovation</td>
<td>-0.0009*</td>
<td>0.0004</td>
</tr>
<tr>
<td>Citizen Ideology</td>
<td>-0.0073**</td>
<td>0.0029</td>
</tr>
<tr>
<td>Litigant Resource Diff.</td>
<td>0.5558***</td>
<td>0.0927</td>
</tr>
</tbody>
</table>

% Categorized Correctly = 59.8%
-2 LLR = 2359.786
Model Chi square = 51.874, df= 5, P< .0001
Gamma = 0.198
Number of Cases = 1742
Mean of dependent Variable = 0.481

* significant at .05
** significant at .01
*** significant at .001
Table 2

Estimated Probabilities of the Likelihood of a Pro-Defendant Vote
for Selected Values of Tort Law and Judicial Liberalism

<table>
<thead>
<tr>
<th>Judicial Liberalism</th>
<th>Tort Law (2 sd above mean)</th>
<th>Tort Law (2 sd below mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (Reagan appointee)</td>
<td>0.60</td>
<td>0.51</td>
</tr>
<tr>
<td>High (Johnson appointee)</td>
<td>0.54</td>
<td>0.43</td>
</tr>
</tbody>
</table>
Table 3

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>MLE</th>
<th>SE</th>
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</thead>
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<tr>
<td>Intercept</td>
<td>0.7882</td>
<td>0.3389</td>
</tr>
<tr>
<td>Judicial Liberalism</td>
<td>-0.1215***</td>
<td>0.0420</td>
</tr>
<tr>
<td>State Tort Law</td>
<td>0.0747</td>
<td>0.0920</td>
</tr>
<tr>
<td>State Tort Innovation</td>
<td>-0.0007</td>
<td>0.0007</td>
</tr>
<tr>
<td>Citizen Ideology</td>
<td>-0.0034</td>
<td>0.0045</td>
</tr>
<tr>
<td>Litigant Resource Diff.</td>
<td>0.2575***</td>
<td>0.0721</td>
</tr>
</tbody>
</table>

% Categorized Correctly = 60.7%

-2 LLR = 909.241
Model Chi square = 24.971, df= 5, P< .0001
Gamma = 0.216
Number of Cases = 743
Mean of dependent Variable = 0.323

* significant at .05
** significant at .01
*** significant at .001
## Table 4


<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Non-Unanimous Cases</th>
<th>Unanimous Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MLE</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.3844</td>
<td>0.7826</td>
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<td>Judicial Liberalism</td>
<td>-0.3061***</td>
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<td>State Tort Law</td>
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<td>State Tort Innovation</td>
<td>0.0005</td>
<td>0.0016</td>
</tr>
<tr>
<td>Citizen Ideology</td>
<td>0.0052</td>
<td>0.0108</td>
</tr>
<tr>
<td>Litigant Resource Diff.</td>
<td>-0.1980</td>
<td>0.3175</td>
</tr>
</tbody>
</table>

% Categorized Correctly = 66.9 %  
-2 LLR = 186.794  
Model Chi square = 11.23  
df= 5  
Gamma = 0.341  
Number of Cases = 144  
Mean of dep Variable = 0.549

* significant at .05  
** significant at .01  
*** significant at .001
ENDNOTES

1 For example, ten of the last thirteen Supreme Court justices previously served on the United States Courts of Appeals.

2 Figures were calculated from the cases in the United States Courts of Appeals Data Base, Donald R. Songer (Principal Investigator), NSF # SES-89-12678 for the years 1960-1988. For earlier years, diversity tort cases constituted a larger portion of the appeals court docket.

3 Primarily, appointment to the Supreme Court; especially since in recent decades most Supreme Court justices have been appointed from the courts of appeals.

4 For example, all hold office "during good behavior" and none can have their salary reduced while in office.

5 Of course, statutory reversal is not constitutionally permissible.

6 The legal reference Shepard’s Citations can be used to trace the subsequent legal history of any published decision. By examining this reference book, one can determine if a given case was even reviewed by any other court in the judicial hierarchy. Shepardization of all cases included in our analysis revealed that the Supreme Court denied petitions for cert in 68 cases (9.76% of the sample) and heard arguments in three cases. But in all three of those cases, the Supreme Court based its decision on procedural issues unrelated to the state law issues involved in the appeals court deliberations. Two cases involved the question of whether the case was properly within the diversity jurisdiction of the federal courts. In the third case, the Supreme Court limited its opinion to a discussion of whether the lower court ruling that the appeal was not timely violated federal rules of civil procedure.

7 Only one of the 697 cases in our sample was reversed by the circuit en banc. That reversal was based solely on the conclusion that the district court lacked diversity jurisdiction because of the presence of "Doe defendants."

8 Of course, this finality of decision is not absolute in either court. The fact that the Supreme Court rarely reviews these cases does not mean they cannot review. However, as Segal and Spaeth acknowledge (1993, 72) finality does not characterize all Supreme Court decisions either as Congress can overturn judicial interpretations of statutes and the Constitution can be amended. However, Segal and Spaeth point out that because such occurrences are so rare, the Supreme Court is not concerned with Congress overruling its “final” decisions. Similarly, in the courts of appeals, the probability of having the substance of a tort diversity decision overruled is extremely low. Thus, we believe the occurrence of such rulings are so infrequent as to render the fear of reversal in these cases negligible.

9 The starting date of 1960 was chosen for both a practical and a theoretical reason. The year 1960 makes good theoretical sense because in that year, modern United States civil liability law began to take a dramatic turn. Decades old legal rules and the reasoning and justifications behind them, began to be set aside and superseded by dramatically different laws and attitudes. Before this time, contract law determined recovery for product related injuries, and only a few jurisdictions recognized negligence causes of action. During the four-year period between 1960 and 1964, the law regarding such product
injury radically changed. While the obligations of consumers decreased, the liability of manufacturers grew wildly (Priest 1990). Since that time, tort liability has been steadily expanded throughout the United States courts based upon a theory dubbed “enterprise liability”, which justifies compensation for injuries through the use of tort based laws (Levmore 1994). The practical reason is that the data for our measure of the state ideological context of decision making begins at 1960. The end date of 1988, coincides nicely with the rise of advocacy for national tort reform.

10 The United States Courts of Appeals Data Base, Donald R. Songer (Principal Investigator), NSF#SES-89-12678. The database and its documentation are available to scholars at the web page of the Program for Law and Judicial Politics at Michigan State University. Web page http://www.ssc.msu.edu/~pls/pljp

11 Some proponents of the Attitudinal Model talk about the "policy preferences" of the justices as the motive behind their decision making. As a result, one might assume that judges attitudes are only relevant to decisions relating to the making of legal "policy." However, we believe that it is quite plausible that the ideological values of judges, at all levels, may influence their decisions even if there are no general policy issues presented by the given case. For example, studies of various courts find correlations between the values of judges and their decisions in criminal cases which do not raise significant policy questions. Thus, we believe that the empirical association found between our measure of judicial values and judicial votes does support the inference that values are influencing the votes.

12 The most widely accepted and frequently used surrogates of judicial preferences in past research on lower federal courts have been the party identification of either the judge or the appointing president (which correlate very highly), or a slightly more refined three point scale of the ideology of the appointing president developed by Tate and Handberg (1991). Generally studies have used measures of the ideology of the appointing president as a surrogate for the ideology of lower court judges because of the well-established finding that presidents have usually sought to select nominees who share their ideological orientations. While many recent presidents have sought to find nominees who shared their ideology in regard to economic regulation and civil liberties policies (Goldman 1997), presidents are not likely to pay much explicit attention to the attitudes toward tort policies in choosing potential nominees. However, judges' attitudes towards tort cases are part of, or at least closely related to, their general ideology on economic policy making (Schubert 1965; Rohde and Spaeth 1976; Goldman 1965). Presidents do tend to consider the economic policy ideology of their nominees, and perhaps even more importantly, such ideology is correlated with political party as well as with the factions within each party. Thus, when a president nominates a member of his party faction who is perceived to be ideologically compatible with the president on issues that are of concern, he will by default also be choosing someone who has different attitudes towards tort policies than those nominated by presidents from other wings, or factions of the party, in addition to those from other parties. Thus, measures that capture the ideology of presidents on economic policy should serve as at least rough surrogates of the tort values of their appointees.

13 Through the implementation of principal components analysis, we assume that there exists an underlying order of these judicial preferences although the scores are not directly measurable. Thus, we collect information on variables that are potentially related to these judicial preferences and employ a principal components analysis to combine these variables into a single index. When constructing this index, the method assumes that each proxy variable is associated with the underlying yet unknown and
unobservable dimension (Weller and Romney 1990). Specifically, principal components analysis reduces a set of variables into a smaller set of summary variables, based on the pattern of statistical similarity among the original variables. In mathematical terms, the analysis finds the basic structure of the data matrix by using a cross-product matrix (a correlation matrix in the current analysis). The principal factor method is applied to the correlation matrix with ones as diagonal elements. The prime characteristic of the principal factor procedure is that each factor account for the maximum possible amount of the variance of the variables. The factors then give the best least squares fit obtainable to the entire correlation matrix. Since the main diagonal is unaltered, the method attempts to account for all the variance of each variable by assuming that all the variance is relevant, thereby creating the component factors.

14 The Auburn judge database was used to determine the state, region, and appointing president for each judge on the appeals court for the 1960-1988 period under study. The United States Courts of Appeals Judge Date Base, Gary Zuk, Deborah J. Barrow, and Gerard S. Gryski (Co-Principal Investigators), NSF#SBR-93-11999. The database and its documentation are available to scholars at the web page of the Program for Law and Judicial Politics at Michigan State University. Web page http://www.ssc.msu.edu/~pls/pljp

15 Specifically, the first principal component accounts for 92% of the "total variance" and the second factor only accounts for 5% of the "total variance". Furthermore, the precipitous drop in the magnitude of the adjacent eigenvalues indicated that this was a single factor model. The remaining "variance", represented by the other principal components is noise, paralleled to measurement error in the real world (Weller and Romney 1990).

16 For complete definition of each of these components, please see appendix A.

17 It is important to note that the values run in the opposite direction than those for the variable “Tort Law”. In this case, the higher values for “State Tort Innovation” represent those states earliest to adopt the numerous plaintiff-oriented tort policies, either through legislative or judicial innovation.

18 The correlation between our two measures of state law is in the direction predicted and is statistically significant, but the magnitude of the association is modest (r= -.20, P<.001). This suggests that each of the two measures is picking up partially different aspects of the state of tort law, making use of both measures superior to reliance upon one of these measures.

19 This measure of state liberalism is related to both of our measures of state tort law, but the associations are modest (for State Tort Law, r=.22, P<.001, and for State Tort Innovation, r=.10, P<.001). These modest correlations suggest that differences in tort law among states are not simply the result in differences in the overall liberalism of the states.

20 Given the lack of consensus within the literature on the best way to operationalize the political preferences of lower federal court judges, we re-ran our analysis with three alternative measures of those preferences. First, we substituted, in turn, two of the components of the score derived from our principal components analysis for that composite indicator: the Segal, et. al. (1996) score for the appointing president and then the Zupan (1992) presidential ADA score of the appointing president. Then, in a separate analysis, we used the percentage of all liberal votes cast by each judge throughout their entire
career on the bench on all cases in the Appeals Court Data Base on issues involving economic regulation and labor relations as our measure of judicial liberalism. All three measures (which are highly correlated with each other) produced similar effects. In each alternative model, the measure of judicial preferences and both of the measures of state tort law remained statistically significant.

21 It might be objected that both of our measures of state law are time bound. While Baum describes his measure as one of "postwar" innovation, for present purposes it is notable that the data on which the measure is based were derived from the 1945-75 period. Therefore, the state rankings may be less applicable for the last half of the data included in the analysis in Table 1. In contrast, the measure we created, "Tort Law", is a dynamic measure with separate values for each state for each of the years analyzed. However, since most of the provisions of law included in the index were not adopted in most states until the 1970s and 1980s, there is little interstate variation before the mid 1970s. To check for this possibility, we re-ran the analysis presented in Table 1 separately for two time periods: 1960-75 and 1976-88. In the first period, the relationship between judicial votes and Baum's tort innovation measure was even stronger than the relationship reported in Table 1, and was significant at the .01 level. In contrast, Tort Law was in the predicted direction but was not statistically significant. For the 1976-88 period, there was a very strong relationship between judge vote and Tort Law (with a coefficient of -0.271, significant at .01), but the relationship of votes to Tort Innovation was not statistically significant. Thus, in both time periods, state law was strongly related to judicial votes, but the measure that best captured the relationship varied over time.

22 We defined "pro-defendant" or "high" on the tort law variable as states that were two standard deviations above the mean value of the tort law variable. "Pro-plaintiff" states were those two standard deviations below the mean.

23 See Atkins and Green (1976) and Songer (1982a) for a demonstration that at least some of the unanimous decisions of the courts of appeals are not characterized by clear, unambiguous law and precedent.

24 Howard's (1981) interviews with 35 appeals court judges yielded the estimate that approximately 90% of their cases would fit into this category of easy cases. Later analysis by Songer (1982a) questioned whether judges had so little discretion, but still concluded that at least two-thirds of their cases were characterized by clear and generally accepted law and precedent.

25 To determine whether the differences in the effects of law and ideology in the unanimous versus non-unanimous cases are statistically significant, we re-ran a single model of all cases with multiplicative terms added to assess the interaction between the presence or absence of dissent and the measures of law and judicial ideology. The results showed that the differences in the effects of judicial ideology and the tort law variable in unanimous versus divided decisions were statistically significant. The differences in the tort innovation variable were not significant.

26 The best-known proponents of the attitudinal model on the Supreme Court have not maintained that the attitudinal model is valid only in highly salient issue areas (e.g., Segal & Spaeth 1993, 359, assert, "since Warren became Chief Justice in 1953 - we have not discovered any narrowly defined issues in which variables of a non-attitudinal sort operate."). Most attitudinalists who have attempted to explain...
judicial voting over the past 35 years have virtually ignored any effects of intensity. The most notable exception, the most recent book by Spaeth and Segal (1999), finds that precedent (as they define it) is only slightly more important in low intensity cases. But even in the lowest salience cases, they conclude that attitudes dominate.