Amicus Curiae, Signaling, and U.S. Supreme Court Oral Arguments

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Abstract

Scholars have successfully demonstrated that *amici curiae* provide information that helps Supreme Court justices make decisions. However, this literature only focuses on briefs submitted by friends of the Court. Here, we seek to determine whether litigants' decision to divide their time with *amici curiae* during oral arguments before the U.S. Supreme Court also affects decisions justices make. Our findings indicate that when more *amici* support the petitioner than the respondent during oral arguments the petitioner is significantly more likely to win the case – and vice versa. Additionally, when more liberal than conservative groups participate in this capacity, justices across the ideological spectrum are significantly more likely to vote liberally. These findings demonstrate that *amicus curiae* participation at oral arguments can signal to the justices the side that should prevail.

I. Introduction

During the 1969 term of the U.S. Supreme Court Tommy "the Cork" Corcoran came to the Court to visit an old friend from his days of work on the New Deal – Justice Hugo Black.[1] Corcoran was now a powerful attorney in Washington D.C. and sought to discuss, with Justice Black, a case from the previous term in which the Court had ruled against one of the world's largest gas pipeline companies.[2] Specifically, Corcoran hoped to convince his old friend that the Court's decision was a mistake and seriously jeopardized the company's future. Black was taken aback by this discussion, especially given that the company was currently petitioning the justices to reconsider their earlier decision.[3] It was incomprehensible to Black that anyone, including an old friend, would actually attempt to lobby a justice, *ex parte*, about a case currently pending before the Court. As such, Corcoran was quickly escorted from Black's chambers.

Not one to be deterred so easily, Corcoran made an appointment to discuss the case with Justice Brennan. Predictably, Brennan reacted like Black and Corcoran was quickly ushered out of Brennan's chambers. While Black was incensed by Corcoran's behavior, he kept the incident to himself. Brennan, on the other hand, told the conference and ultimately recused himself from deciding on the petition for rehearing. He also sought advice from Justice Harlan. Harlan told Brennan that he would have removed himself if Corcoran had called on him, but that each justice must decide for himself whether recusal is necessary. On another level, however, Harlan was

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[1] This section is follows the discussion of this incident in Woodward and Armstrong (1979) except where noted.

[2] The antitrust case in question was *Utah Public Service Commission v. El Paso Natural Gas Co.* (395 U.S. 464, 1969).

[3] The Court does not often allow rehearings (rearguments) in cases it decides. However, under the right conditions it will do so (Hoekstra and Johnson 2003).

amused that such a well-known and experienced lobbyist could not distinguish between lobbying Congress and lobbying the Supreme Court.

The moral of Corcoran's experience with Justices Black and Brennan is clear – direct lobbying of the Court is strictly prohibited. As such, the only way interested parties (who are not the litigants in a case) can usually persuade the Court to make a particular decision is through filing briefs *amicus curiae* (friend of the Court). There are some instances, however, when an outside party does have the opportunity to directly address the justices. Certainly this direct approach does not take place *ex parte* in a justice's chambers as that would fall under the Corcoran rule. However, outside interests may still be able to address the justices face-to-face by participating in oral arguments that are held in most cases. While this phenomenon is rare, it does occur in about seven percent of all cases that receive a full hearing.

Scholars have already demonstrated that participation by one particular *amicus* at the oral arguments may advantage one of the litigants. Indeed, when the Solicitor General joins a case as *amicus curiae* the side the government supports is more successful when it appears before the Court during oral arguments than when the Solicitor General simply submits a brief (Segal 1988). The question that interests us is whether typical *amici* – who do not have the same relationship with the Court that the Solicitor General enjoys (see e.g., Salokar 1992; Segal 1991, 1990, 1988; Puro 1981) – can also help litigants garner additional success by appearing at oral arguments. To answer this question we analyze the Court's decision to reverse or affirm in all formally decided cases between 1953 and 1985. Additionally, we analyze the extent to which *amici* affect individual justices' ideological votes on the merits. Taking this two-fold process allows us to assess both aggregate and individual level effects of *amicus curiae* participation at the Court's oral arguments.

II. Theoretical Foundations

Many scholars have analyzed information provided to the U.S. Supreme Court through briefs *amicus curiae* and how this information helps justices make decisions (see e.g., Caldeira and Wright 1988; Epstein and Kobylka 1992; Songer and Sheehan 1993; Spriggs and Wahlbeck 1997; Epstein and Knight 1999). In most cases a*mici* have the opportunity to persuade the justices at two stages of its decision making process – when the Court sets it agenda and when it decides on the merits of a case. This section briefly considers the influence of outside interests at these stages. From there it explains why we expect *amici* to also affect Court decisions by appearing at oral arguments.

A. The Role of Amicus Curiae Briefs

When the justices set their agenda they may use *amicus* support as a signal to help them decide which cases to hear. Stern et al. (1993) argue that justices especially use these signals when they are unsure about whether to grant *certiorari*: "When there is doubt, as there usually is, that a petition will be granted, statements by *amici* that show, beyond what the petition shows, that the case is generally important can be of significant aid to the petitioner" (1993, 378). Justice Frankfurter's opinion in *Georgia v Evans* (1942) demonstrates this point particularly well. He notes, "The importance of the question in the enforcement of the Sherman Law is attested by the fact that thirty-four states, as friends of the Court, supported Georgia's request that the decision be reviewed on *certiorari*. And so we brought the case here." In their examination of this process Caldeira and Wright (1988, 1112) systematically demonstrate that *amici curiae* can signal the Court about the significance of cases. This position has become the cornerstone of research into the influence of *amici curiae* at the *cert*. stage. For our purposes, Caldeira and

Wright's findings point to the notion that *amici* can effectively signal the justices by simply participating at the agenda setting stage.

Other scholars have studied the influence of *amici* at the merits stage, and they reach similar conclusions. For instance Epstein and Knight (1999) stress that, as strategic actors, justices use *amicus curiae* briefs to obtain information about the preferences of actors beyond the Court. This information acts as a signal about policy the justices can set in light of the preferences of Congress, for example. Additionally, Spriggs and Wahlbeck (1997) analyze the conditions under which the Court is likely to adopt positions forwarded in *amicus* briefs. They demonstrate that the justices are less likely to adopt positions from *amicus* briefs that exclusively add new arguments to the policy space. The implication, for them, is that *amici* do influence the Court's decisions, but they do so mainly when they reinforce the issues presented by the parties (1997, 382). In other words, by reiterating arguments found in the litigants' briefs *amici* signal that a particular argument is important for the justices to decide.

B. Amici Curiae and Oral Arguments

The literature on *amicus* participation suggests that these groups can signal their preferences to the justices at both the *cert*. and the merits stages just by being present. However, these groups may sometimes believe a stronger signal is necessary to push the Court toward a particular outcome. One way to do so is to face the justices in person – at oral arguments – to

explain their position.[4] To further our argument we turn to a discussion of their participation at oral arguments, and what such participation may mean for case outcomes.[5]

Initially, we must establish what it takes for *amici* to participate in a case generally, as well as how often they actually do so. The first requirement for an *amicus* to appear at oral arguments is that it must file a brief. As Rule 28.6 delineates, "Oral argument will not be allowed on behalf of any party for whom a brief has not been filed." Although this rule technically applies only to litigants, *amici curiae* who want to participate must follow it as well. Thus, groups or individuals must initially follow both subsections of Rule 37.3:

> (a) An *amicus curiae* brief in a case before the Court for oral argument may be filed if accompanied by the written consent of all parties, or if the Court grants leave to file under subparagraph 3(b) of this Rule.
> (b) When a party to a case before the Court for oral argument has withheld consent, a motion for leave to file an *amicus curiae* brief may be presented to the Court. The motion, prepared as required by Rule 33.1 and as one document with the brief sought to be filed, shall be submitted within the time allowed for filing an *amicus curiae* brief, and shall indicate the party or parties who have withheld consent and state the nature of the movant's interest.

Gaining permission to submit *amicus* briefs has become commonplace. Indeed, Epstein and Knight point out that even when the litigants deny an *amicus* request to file a brief, the Court

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[4] Recent literature suggests that justices can and do obtain information from oral arguments. For instance, Johnson (2001, 2004) demonstrates that justices obtain information about policy, about external actors' preferences, and about institutional rules that may affect their decisions.

[5] Although we do not specifically address the informational role *amici* may play during oral arguments, like Spriggs and Wahlbeck (1997) we assume they provide information during these proceedings by either highlighting key arguments from their briefs, or by adding new information to the record. There is clear empirical support for this assumption, as Johnson (2001, 2004) demonstrates that when *amici* participate at oral arguments the justices have an additional opportunity to obtain information about their policy options as well as about how their decisions may affect actors beyond the Court. However, we leave for future research the analysis of the types of arguments presented during the oral arguments.

almost never denies such a motion (1999, 225).[6] This suggests justices now accept that *amici* play an integral role in the Court's decision making process. Other scholars have substantiated this claim. As noted above, Spriggs and Wahlbeck (1997) argue that the Court uses information provided in *amicus* briefs, especially when the brief signals that arguments articulated in a litigant's brief are important for the outcome of the case. The point is that there are few instances when *amici* cannot participate by filing a brief because both the parties and the Court have denied such an opportunity.

Participating at oral arguments is different. Rule 28.7 delineates the requirements that *amici* must overcome in order to participate at these proceedings:

> …counsel for an *amicus curiae* whose brief has been filed as provided in Rule 37 may argue orally on the side of a party, ***with the consent of that party***. In the absence of consent, counsel for an *amicus curiae* ***may seek leave of the Court*** to argue orally by a motion setting out specifically and concisely why oral argument would provide assistance to the Court not otherwise available. ***Such a motion will be granted only in the most extraordinary circumstances*** (emphasis added).

This rule, made more stringent in 1980, keeps almost all *amici curiae* (with the exception of the Solicitor General) from participating in the oral arguments of a case (Stern et al. 1993). The result, as Stern et al. point out, is that "efforts of private *amici* to participate in arguments have seldom been successful" (1993, 581). In other words, while the barriers to participate in a case are relatively low if an *amicus* only wants to file a brief, the barriers are almost insurmountable if that same group wants to appear before the Court. Table 1 substantiates this claim, as in the

[6] Specifically, Epstein and Knight find that the Court granted 89 percent of the motions to file received between 1969 and 1981. Additionally, during the 1994 term the Court only rejected one of 111 requests. The Solicitor General's office is the one *amicus* that is virtually guaranteed participation if it so desires (Stern et al. 1993).

4,635 cases in our sample only 433 *amici* were allowed to appear before the justices at oral arguments in a total of 347 cases.[7]

[Table 1 about here]

The question is why the Court usually disfavors, and therefore disallows, *amici* the opportunity to argue beyond what they present in their legal briefs? Stern et al. (1993) suggest several procedural reasons. First, the Court believes that *amici* can set forth their arguments well enough in writing and therefore do not need to be heard in person. Second, the justices are usually unwilling to increase the time allotted for oral arguments in a case because the Court's most precious resource – time – is limited. Third, if a party is not willing to give up at least a third of its time – which most litigants are unwilling to do – the *amicus* is simply prohibited from appearing at these proceedings because the Court believes arguments are not valuable if they are less than ten minutes long (Stern et al. 1993, 579). The point is that there are clear procedural and practical reasons why the justices do not want additional attorneys to argue before them. Therefore the Court simply disfavors divided arguments "even if the parties on one side of the case have divergent interests or perspectives" (Stern et al. 1993, 578).

The fact that the Court has such demanding standards for *amici* to appear before it suggests that, in most cases, justices do not think these groups can provide additional insight into a case beyond what is already in the written briefs provided by them and the parties. The interesting question, then, is if these groups have already filed briefs, and if having them appear

[7] While this table includes all *amicus* participation at oral arguments, the total differs from the total participation we examine in our analysis. Specifically, our models exclude all *amici* whose ideological direction could not be discerned. Additionally, we exclude all of the *amici* from *Brown v. Board of Education* (1954) because we view this case as an outlier given that the United States as well as at least seven states participated at the oral arguments as *amici curiae*.

at oral arguments provides no benefit for the justices, why would they ever be allowed to participate in this additional capacity? We believe the answer is that the justices believe *amici* can, however rarely, affect the outcome of a case by providing a signal beyond the arguments delineated in their briefs. That is, because justices need information to help them decide cases (Epstein and Kobylka 1992; Johnson 2004) *amici* are occasionally allowed to participate at oral arguments to help them sort out how the Court should do so. In so doing, *amici* may signal that a particular outcome should be reached by providing or reiterating key information (a point we address in related research), while oftentimes their appearance is enough to signal how the justices should act.[8]

This argument is consistent with game theoretic literature which demonstrates that in order for signals to be meaningful they must be costly (Banks and Sobel 1987; Crawford and Sobel 1992). As we argue above, the justices disfavor divided arguments altogether, and go to great lengths to limit the practice. Thus, the decision of a litigant to divide its time is costly because it conflicts with the Court's norms of participation at oral argument by those other than the litigants in a case. Additionally, litigants' endure the cost of having less time to make their own case before the justices. Indeed, the Court does not often grant additional time for oral arguments, and therefore litigants compromise their ability to argue if they allow an *amicus curiae* to do so. Thus, the appearance of *amici curiae* at oral arguments is costly on two levels.

[8] This "signal by participation" is akin to Caldeira and Wright's (1988) argument that *amici* can send a signal to the Court about what cases it should hear by participating at the agenda setting stage as well as to Spriggs and Wahlbeck's (1997) argument about signaling which issues are important for the Court. While Caldeira and Wright argue that there may be some informational benefit to the *amicus* participation, their main argument is that participation itself sends a signal about which cases are important for the Court to decide. In our case, the signal is about how the Court should rule in cases it has already decided to decide.

This is important because it suggests that when litigants do allow *amici* to participate at these proceedings it sends a strong signal about how the Court should ultimately rule in the case.

Perhaps a more powerful reason that *amicus* participation at oral arguments provides a credible signal to the Court is that the justices do not have the first say about whether *amici* are allowed to participate during these proceedings. Indeed, interested *amici* first must seek the permission of the litigant on whose behalf the group would argue, and convince that litigant to share its allotted time before the Court. If the litigant agrees to yield some of its time to the *amicus* the Court has no say on the matter. It is only after a litigant denies a group the ability to participate that *amici* can turn to the Court. This is an important distinction because if the decision for *amici* to participate is exogenous to the Court then there can be no endogenous bias based on the justice's ideological predilections.[9] Therefore, the decision can send a credible and reliable signal to the justices about how they should decide a particular case.

We demonstrate the extent to which the litigants or the Court controls the decision to allow *amicus* participation at oral arguments by comparing all of the Court's decisions on pre oral argument motions with the list of *amici* who appeared at these proceedings from 1953 to

[9] This argument is also enhanced by the fact that in 42 cases where *amici* participated at the oral arguments the Court actually denied at least one other *amicus* the opportunity to do so. While we did not code every case in the sample to determine how often the Court denies *amici* permission to participate at oral arguments, these data suggest that it does happen in a significant minority of cases. Note also that we attempted to code the denials to determine whether there is a correlation between them and the Court's mean ideology. However, the orders of denial do not indicate which side the denied *amici* would support. Thus, this analysis is not possible. The only *amicus* that is allowed to participate, almost at will, is the Solicitor General of the United States.

1985.[10] Table 2 presents the results of this analysis. It demonstrates that in the sample of cases where *amici* participate at oral arguments the Court is usually not involved in deciding whether they are allowed to appear. Specifically, in 74 percent of cases the litigants make the decision, while the Court does so 26 percent of the time. This difference is statistically significant ($p < .001$). Thus, in most cases, the Court does not control whether *amici* participate in oral arguments.

[Table 2 about here]

In the end the key question is, if the Court disfavors participation by *amici* at oral arguments, why does it allow them to participate in any cases at all? Additionally, why doesn't it simply change its rules so that *amici* never participate in these proceedings? As we note throughout this section our argument is that, by participating at oral arguments, *amici* provide signals that may help push the justices toward a given outcome.[11] Specifically, based on

[10] Using Lexis, we searched on either the case name (for pre-1970 term cases) or on the docket number (for cases beginning in 1970). This allowed us to determine when the Court granted permission for an *amicus* to appear at oral arguments. When the party sought the Court's permission a motion ruling exists. For example, in *City Of Burbank et al. v. Lockheed Air Terminal, Inc., et al.* (1973) the Court handed down the following ruling: "Motion of the Attorney General of California for leave to participate in oral argument as *amicus curiae* in support of appellants granted and 15 minutes allotted for that purpose…" In other cases (e.g., *City Of Lafayette, Louisiana, et al. v. Louisiana Power & Light* [1978]) the *amicus* simply appeared at the oral arguments with no motion. In the former instance, the Court clearly had a say in the decision, in the latter it did not – the litigants acted on their own. Note that we differentiate between Solicitor General participation based on the criteria set out in Gibson (Johnson 2003). When the Solicitor General chooses to participate we consider such a decision as exogenous to the Court. However, when the Court specifically invites the Solicitor General to participate the Court has the ultimate say.

[11] A related question, then, is what drives the Court to grant permission to *amici* when they ask the Court for time at the oral arguments. This is an interesting and important question that we are in the process of analyzing.

literature about amicus curiae participation, signaling, and the Court's own rules, we test the hypothesis that:

> ***Amicus Participation Hypothesis***: The presence of *amici curiae* at oral arguments has a direct effect on the outcome of cases decided by the Supreme Court – both in the aggregate (whether the Court affirms or reverses) and individually (whether individual justices vote liberally or conservatively).

III. Data and Methods

To test the two prongs of our hypothesis we rely primarily on Gibson's *United States Supreme Court Database, Phase II: 1953-1985* (1997). These data are the first to include variables about all *amicus curiae* participation and position taking before the Supreme Court. More important for this analysis is the fact that these data also include cases when *amici* are allowed to participate in the oral arguments of a case. Thus, this database provides a unique opportunity to test the conventional wisdom about the role these proceedings play for the Court.

Dependent Variables

Initially we analyze the outcome of every orally argued case between 1953 and 1985 (N = 4,635).[12] Our first dependent variable therefore focuses on whether the presence of *amici*

Additionally, we are in the process of analyzing how the information presented at the oral arguments affects justices' dispositive votes

[12] We use the docket number as the unit of analysis because in consolidated cases different *amici curiae* may be allowed to argue in one docketed case but not in the others. Thus, to ensure that we capture all instances of *amicus* participation at this stage, this is the appropriate unit of analysis. Additionally, because we are interested in the effect of oral arguments on justices' votes, we exclude all cases that are not orally argued (thus eliminating all summary judgment cases). Accounting for both of these factors decreases the sample from 7,161 to 4,982 cases. Because we are measuring the direction of ideological votes of justices we also exclude all cases that do not come through the *certiorari* or appeals process. This eliminates 93 more cases. Four cases are eliminated because Gibson has the docket number coded as –1, 46 cases are dropped because there is no clear ideological outcome in the case,

during oral arguments in these 4635 cases affects the Court's decision to reverse or affirm a lower court decision. It is coded 1 if the Court reverses and 0 if it affirms. Because this measure is dichotomous we employ a logit model in conjunction with Stata 8.0 to estimate three models. The first model includes all cases in the sample, the second model includes all civil liberties cases in the sample, and the third model includes all economics cases in the sample.

Additionally, because the attitudinal model focuses on an individual level phenomenon – the effect of ideology on judicial behavior – we also model how the presence of *amici* during oral arguments affects the direction of individual justice's ideological votes. The dependent variable for this analysis consists of 39,790 individual votes which are coded 1 if a justice votes liberally in a case and 0 if the justice votes conservatively.[13] Just as with the aggregate analysis we estimate logit models for all cases, for civil liberties cases, and for economics cases.

Independent Variables: Aggregate Models

The aggregate models include several independent variables. First, we include a variable that measures the difference between the number of *amici* at oral argument who support the petitioner versus the number who support the respondent. This variable has a mean of .02 and ranges from two (two more groups supporting petitioner than respondent) to negative two (two more groups supporting respondent than petitioner).[14] We expect this variable to have a positive

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and 199 cases are dropped because the issue area is miscellaneous (VALUE 13 in Spaeth 2001). Finally, note that we exclude 1688 observations because of unclear votes for particular justices, and five observations are excluded because we exclude *Brown v. Board of Education* (1954) as an outlier.

[13] We use the conventional definition of liberal votes. For an explanation of this operationalization see Gibson (1997, 72-74) and Epstein et al. (1996, 485).

[14] We analyzed whether cases in which *amici* participate at oral argument are unique and found that they are not. Indeed, *amici* are significantly more likely to appear in cases that are not politically or legally salient, and in cases

and statistically significant relationship with the Court's propensity to reverse a lower court decision.[15]

Beyond our variable of interest we include several control variables. First, to control for the effect of groups who participate by filing an *amicus* brief on the merits, but not by participating at the oral arguments, we include a variable that is coded as the difference between the number of groups who support the petitioner and those who support the respondent. This variable ranges from 33 more groups supporting the petitioner to 37 more groups supporting the respondent and has a mean value of .02.

Second, to control for the Court's propensity to reverse lower court decisions (Palmer 1982; Boucher and Segal 1995) we include a variable to determine the likelihood of a reversal. This variable takes on a value of 1 if the lower court decision is liberal (conservative) and the median of the court is conservative (liberal).[16] Alternatively, if the lower court decision is liberal

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that do not include multiple legal provisions (results available from the authors upon request). This indicates that these cases are not different from the vast majority of cases the Court decides, given that most cases decided by the Court are neither salient nor complex.

[15] To control for the selection bias that results when the justices decide who is allowed to participate at oral arguments this variable only includes cases where the parties granted the *amicus* permission, as well as when the Solicitor General decides on its own to participate. In other words, this variable is purged of all cases where the *amicus* asks the Court for its permission to orally argue. Note, however, that when we estimate the model ***only*** on the cases where the Court granted permission for an *amicus* to appear, the results for the full model and for the economics model do not change, but there is no statistically significant effect in civil liberties cases. The key difference is that our method solves the selection bias problem inherent if we include cases where the Court grants permission.

[16] We determined the median by calculating the percent of liberal votes cast by each justice for Spaeth's (2001) 12 issue areas for all years prior to the current term. From there we aligned the justices for each term within each issue

(conservative) and the median of the court is liberal (conservative) then this variable takes on a value of 0.

We also control for several case level factors. To determine whether the effect of *amicus* participation varies between Court eras we include a dummy variable that is coded 1 for all cases decided prior to the 1969 term, and 0 for all cases decided during the 1969 term and thereafter. To measure legal salience, we code all cases where the Court struck down a law as unconstitutional or overturned existing precedent as 1, and all other cases as 0 (Maltzman et al. 2000). For political salience we use Epstein and Segal's (2000) dichotomous variable that measures whether an account of the case appeared on the front-page of the *New York Times* (Epstein and Segal 2000).[17] Finally, to control for case complexity we include Gibson's measure that equals 1 when a case involves multiple legal provisions and equals 0 for all other cases.

Independent Variables: Individual Models

For the individual level models our main independent variable changes to whether more liberal than conservative *amici* participated at oral arguments. This variable has a mean value of .014 and ranges from negative two (two more conservative than liberal groups) to one (one more

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area and determined the median. If the median voted liberally more than 50 percent of the time we considered him or her liberal. Note that we used this procedure so that the medians were issue specific. When we use alternative measures of ideology (e.g. Segal/Cover [1989] or Martin/Quinn [2002] scores) to calculate the median the results do not change.

[17] We realize that this measure of salience is ex post because it measures salience only after cases are decided. However, currently available measures of salience are not viable options. Indeed, while the number of *amici* who appear in a case can be used to determine the level of political salience (Maltzman et al. 2000) we cannot use this measure because we already include variables of *amicus* participation in the model. Because we believe our model would not be specified correctly without a measure of political salience, we still choose to include it.

liberal than conservative group).[18] We expect this variable to have a positive and statistically significant relationship with a justice's propensity to vote liberally

Beyond our variable of interest in the second model we include several controls. As with the aggregate models we first control for the difference between the number of liberal and conservative groups who file briefs in a case but who do not appear at oral arguments. Second, we include a measure of each justice's ideology – their Martin/Quinn score (2002).[19] Martin/Quinn scores are "similar in spirit to D-Nominate scores," but are created in a much different manner (Martin and Quinn 2002). Specifically, using a dynamic item response model with Bayesian inference Martin and Quinn fit multivariate dynamic linear models to create measures of justices' ideology across time and across issue areas (for a full derivation of their procedure see Martin and Quinn 2002). This measure allows us to directly control for the attitudinal explanation that only a justice's ideology affects her votes. It ranges from -6.71 (the most liberal justice in the sample) to 4.39 (the most conservative justice in the sample) and has a

[18] To create this measure we used Gibson (1997) to determine which side the *amici* supported, which side won the case, and the ideological direction of the Court's decision. Note that we found three cases where Gibson's data did not match what the Court's decision said about who participated in a case. We corrected these mistakes and are confident that this variable is coded accurately.

[19] The conventional measure for justices' ideology is Segal/Cover scores (1989). These scores have been widely used because they solve the endogeneity problem that many studies of Supreme Court voting behavior fall victim to by using past votes to predict future votes. However, they are not dynamic – meaning that the score created based on editorials from the confirmation process is the same score used in the middle and at the end of a justice's tenure on the Court. The Segal/Cover scores also do not work well outside of civil liberties cases (Epstein and Mershon 1996). Given that Martin/Quinn scores are dynamic, given that they work in issue areas beyond civil liberties cases, and given existing evidence that justices' preferences do change over time (Epstein et al. 1998; Martin and Quinn 2002), we employ the Martin and Quinn scores (2002) rather than Segal/Cover scores (1989).

mean of -.193. With this operationalization, we expect this variable to have a negative effect on a justice's propensity to vote liberally. Finally, we include the same case characteristic variables as we did in the aggregate models.

IV. Results

Table 3 presents the results for the aggregate models, and the results are compelling. In all three models our variable of interest is in the hypothesized direction and reaches statistical significance ($p < .01$ for each model). This demonstrates that, even in light of two plausible competing explanations, the presence of more *amici* on one side during oral arguments affects the outcome of a case. Indeed, even though the presence of more *amicus* briefs that seek reversal increases the propensity of the Court to reverse, there is still an added effect when some of these groups also participate in the oral arguments. Additionally, even though the Court is more likely to reverse (except in economics cases) when the median justice is ideologically opposed to the lower court decision, the presence of more *amici* asking for reversal at oral arguments still affects the Court's decision.

[Table 3 about here]

Because it is difficult to determine the meaning of the logit estimates presented in Table 3, we also calculated the predicted probability that the Court would reverse in a given case. To do so we used King et al.'s (2000) Clarify software; the results are presented in Table 4. We first focus on the model that includes all cases in our sample. When all of the variables are held at their mean or modal value the propensity of the Court to reverse is about 69 percent. From this baseline we varied the number of *amici* at oral arguments who support the petitioner versus the number who support the respondent. When two more *amici* support the respondent the propensity of reversal drops to 36 percent. However, when two more *amici* support the

petitioner there is an 89 percent chance of reversal. The results are similar for both the civil liberties model and for the economics model. Indeed, the probability of reversal increases from 47 to 89 percent in civil liberties cases, and from 46 to 87 percent in economics cases when we vary the *amici* oral argument variable from its minimum to its maximum support for the petitioner. This demonstrates that the presence of *amici* at oral arguments has a substantive effect on the dispositive outcome of cases decided by the Supreme Court.

[Table 4 about here]

Beyond the aggregate findings the signals sent also have an impact on individual justice's behavior. What is strikingly evident in Table 5 is that even when controlling for the key conventional explanation – a justice's ideology – the parameter estimate for our oral argument variable is in the hypothesized direction and statistically significant ($p < .001$) for the full model (column 1). In other words, when more liberal (conservative) *amici* than conservative (liberal) *amici* participate by filing briefs ***and*** by presenting oral arguments to the Court, justices are more likely to cast liberal votes on the merits.[20] This is an important finding because it suggests that beyond affecting justices' substantive decisions (Johnson 2001, 2004) the oral argument phase of the Court's decision making process does indeed play a role in how justices decide.[21]

[Table 5 about here]

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[20] Because *amici* appear at oral arguments in so few cases we also estimate this model on only those cases where *amici* actually do participate (N = 342). The results do not change, and the effect of our key variable is still significant ($p < .001$).

[21] Note that we also estimated all of the models in Table 5 using Segal/Cover scores as the measure of ideology in place of the Martin/Quinn scores. The results are virtually identical, which means that our model is robust to respecification.

Table 5 also presents the results for our models for civil liberties and economics cases. While the effect of ideology is statistically stronger in civil liberties cases, its effect still does not overwhelm the propensity for oral arguments to affect justices' decisions. In fact, the coefficient on our variable of interest is larger than it is in the full model. The effect is also similar in economics cases.[22]

While it is possible that our statistical results in these models are simply spurious correlations because the number of observations is so large, and because *amici* appear in so few oral arguments, we are confident this is not the case. To demonstrate this, we again use King et al.'s (2000) Clarify program to calculate the predicted probability that justices will cast a liberal vote in a particular case. First, we focus on the initial model that includes all cases. Holding all of the variables at their mean or mode the baseline probability that a justice will cast a liberal vote in a case is 48 percent.

Next, we keep all of the control variables at their mean or mode while varying the *amicus* oral argument variable from negative two (two more conservative groups than liberal groups) to one (one more liberal group than conservative group) for each justice in the sample. The results

[22] Note that when we estimate these models without the Solicitor General included as an *amicus* the results do not change for the overall model or for the economics model. However, the coefficient on our variable of interest is not significant in the civil liberties model. We also estimated the model on the cases that fall outside of the civil liberties and economics issues areas (N = 7581). This model looks almost exactly like the full model, except that the multiple legal provisions variable switches signs. Finally, we estimated our model separately on each of Spaeth's (2001) 12 issue specific categories to see if this effect holds across all issues. The results are compelling. In every issue area except First Amendment cases and Due Process cases our key variable is significant at least at the $p < .01$ level. The analysis did not work in Privacy cases or Federal Taxation cases due to high levels of collinearity, and we did not estimate it on Interstate Relations cases because there is only one case in that category.

are presented in Table 6.[23] The most conservative justice in the sample is 26 percent more likely to vote liberally between the minimum and maximum values of our key variable. In contrast, a moderate justice is 44 percent more likely to vote liberally, while the most liberal justice is about 30 percent more likely to act in this manner. The point is that while conservative justices are still likely to vote conservatively in any given case, their propensity to do so significantly decreases when more liberal than conservative groups appear at the oral arguments.

[Table 6 about here]

The second section of the table shows that there are stark differences across the ideological spectrum for how our *amicus* variable affects votes in civil liberties cases. Whereas a conservative justice is 17 percent more likely to vote liberally when more liberal than conservative *amici* appear, moderates are 27 percent more likely to vote liberally, and liberals are 14 percent more likely to act in this manner. Finally, the third section of Table 4 presents the probabilities for economics cases. Here it is evident that the effect of having more liberal *amici* at oral argument is about equal for conservatives, moderates, and liberals. As we move from the minimum to the maximum number of our key variable, the most conservative justice is 36 percent more likely to vote liberally. At the same time, the moderate is 42 percent more likely, while the extreme liberal is 34 percent more likely to do so.

More importantly, the presence of *amici* at oral arguments has the propensity to change the outcome of a case. Indeed, the moderate justice in this table actually switches from having a high probability of voting conservatively to having a high probability of voting liberally when we move from the minimum to maximum of our key variable. This effect holds in civil liberties

[23] While we only report the results for three justices (the most conservative, the most liberal, and a moderate), we have the results for all twenty-three justices who sat on the Court during the time frame of our analysis.

and economics cases as well. Finally, moderate and conservative justices are likely to switch votes in economics cases. This is further evidence that *amici* can send an effective signal about how a case should be decided by appearing at oral arguments.[24]

V. Conclusion

The results here teach us several lessons about the Supreme Court's decision making process. Most generally our findings suggest that we cannot continue to look simply at conventional explanations – meaning ideology – to explain and predict case outcomes and justices' votes (see e.g., Segal and Spaeth 2002). Rather, scholars need to realize that the process – from decisions on certiorari (Caldeira and Wright 1988), to oral arguments (Johnson 2004), to

[24] We estimated several additional models to determine if our key independent variable has a stronger effect on moderates (those whom we might assume are the most likely to be persuaded by oral arguments because they are the most likely to be undecided) than on the ideologically extreme justices (those who are probably least likely to be persuaded by what transpires during oral arguments). We tested for this interaction effect in several ways. First, we estimated a model that included a quadratic measure of the Martin/Quinn scores, which we also interacted with our *amicus* variable. This test allowed us to determine whether a curvilinear effect exists; none does. Second, we used a measure of folded ideology where the Martin/Quinn score was converted to a scale that ran from the most ideologically extreme justices (liberal and conservative) to the most moderate. As with the quadratic term, we interacted this variable with our variable of interest. Again there was no effect. Finally, we created a series of dummy variables – the first included all extreme conservatives, the second moderates, and the third extreme liberals. We included both of the dummies for the extreme set of justices in the model (as well as the interaction terms) to test whether they were less likely than the moderates (the baseline) to be persuaded by our *amicus* variable. Just as with the first two operationalizations we found no effect. This leads us to conclude that including just the direct measure of ideology, and the direct measure of liberal versus conservative *amicus* participation, is the best way to specify our model.

heresthetical maneuvering during conference (Johnson, Spriggs, and Wahlbeck 2005; Epstein and Shvetsova 2002) –can and does play a role in how cases are decided.

The findings here also add to the recent work that has been done on the oral argument phase of the Court's decision making process. We know that justices gather information about a case during these proceedings (Johnson 2001), that the quality of oral advocacy can affect justices' votes (Johnson, Spriggs, and Wahlbeck 2006), and that justices begin the coalition formation process as they ask questions and make comments to counsel (Johnson 2004). We add to this growing literature by demonstrating that litigants and interest groups can use these proceedings to signal the justices about how a case should be decided.

In the end, there are many more questions that can and must be asked about how oral arguments affect the decisions made by Supreme Court justices, and more specifically about the role of *amici curiae* at these proceedings. For instance, it is necessary to determine the conditions under which *amici* are allowed to participate, and which groups are allowed to do so. Additionally, we should analyze the specific information they provide to the Court, the questions justices ask them, and whether these questions are different than questions asked of the litigants. Finally, and most importantly, we must analyze the substantive legal and policy effect of *amicus* participation. Answering these questions will give much more insight into the Court's relationship with *amici curiae*, how oral arguments affect its decisions, and how the only counter-majoritarian institution in our federal government gathers information as it makes decisions that affect every citizen in the nation. For now, however, our findings provide strong empirical evidence that the presence of *amici* at oral arguments affects the outcome of cases at the U.S. Supreme Court.

Appendix: *Amici* Participating in Supreme Court Oral Arguments One Time Only (1953-1985)

Group
American Blood Resources Association
American Council of Life Insurance
American Psychiatric Association
Americans for Public Schools
City of Mobile, Alabama
Cleveland Burgess
Coalition of National Voluntary Organizations
Compania Azucarera Vertientes-Camaguey de Cuba
Confederated Tribes of the Colville Indian Reservation
Congress of Industrial Organizations
Dewey County, South Dakota
Equal Employment Opportunity Commission
Federal Community Defender Organization of the Legal Aid
Federal Home Loan Bank Board
Federal Power Commission
Governors Conference
Guild of Prescription Opticians of America, inc.
Independent Natural Gas Association of America
Interstate Commerce Commission
Japanese American Citizens League
Judges of the Court of Claims
Lawyers Committee for Civil Rights Under Law
Memphis City Schools
Michigan Bell Telephone Company
Multi State Tax Commission
NAACP Legal Defense and Educational Fund, inc.
National Agricultural Chemicals Association
National Association of Broadcasters
National Association of Realtors
National Association of Retail Grocers of the United States
National Broadcasting Company, inc.
National Council of Juvenile Court Judges
National Jewish Commission on Law and Public Affairs
National Organization of Women Legal Defense and Education
National Rural Electric Cooperative Association
New York Clearing House Association
New York County District Attorney
New York State Athletic Commission

New York Times Display Advertising Salesmen Steering Committee
Ohio Association of Juvenile Court Judges
Pennsylvania Savings and Loan League
Planned Parenthood Federation of America, inc.
Puerto Rico
Radio Station WAIT, Chicago
Register of Copyrights
Republic of France
Secretary of Labor
State Mutual Life Insurance Company of Massachusetts
State of Arkansas
State of Colorado
State of Idaho
State of Illinois
State of Maryland
State of Nebraska
State of Oklahoma
State of Vermont
Supreme Court of Pennsylvania
Twin Lakes Reservoir and Canal Company
United States Court of Claims
United States Court of Customs and Patent Appeals
United States Senate
University of New York

Works Cited

Banks, Jeffrey, and Joel Sobel. 1987. "Equilibrium Selection in Signaling Games." *Econometrica* 55 (May): 647-61.

Boucher, Robert L., Jr., and Jeffrey A. Segal. 1995. "Supreme Court Justices as Strategic Decision Makers: Aggressive Grants and Defensive Denials on the Vinson Court." *Journal of Politics* Vol. 57, #3 (August): 824-37.

Caldeira, Gregory, and John Wright. 1988. "Organized Interests and Agenda Setting in the U.S. Supreme Court." *American Political Science Review*. Vol. 82., # 4 (December): 1109-1127.

Crawford, Vincent, and Joel Sobel. 1982. "Strategic Information Transmission." *Econometrica* 50 (November): 1431-51.

Epstein, Lee, and Carol Mershon. 1996. "Measuring Political Preferences." *American Journal of Political Science*. Vol. 40 #1 (February): 260-294.

Epstein, Lee, Valerie J. Hoekstra, Jeffrey A. Segal, and Harold J. Spaeth. 1998. "Do Political Preferences Change" A Longitudinal Study of U.S. Supreme Court Justices." *Journal of Politics*. Vol. 60, #3 (August): 801-818.

Epstein, Lee, and Jack Knight. 1999. "Mapping out the Strategic Terrain: The Informational Role of *Amici Curiae*." In: *Supreme Court Politics: Institutional Perspectives*. Howard Gillman and Cornell Clayton editors. Chicago: University of Chicago Press.

Epstein, Lee, and Joseph F. Kobylka. 1992. *The Supreme Court and Legal Change: Abortion and the Death Penalty*. Chapel Hill: University of North Carolina Press.

Epstein, Lee, and Jeffrey Segal. 2000. "Measuring issue salience." *American Journal of Political Science* Vol. 44, #1(January): 66-83.

Epstein, Lee, Jeffrey A. Segal, Harold J. Spaeth, and Thomas G. Walker. 1996. *The Supreme Court Compendium: Data, Decisions and Developments*. 2nd Ed. Washington, D.C.: Congressional Quarterly Press.

Epstein, Lee, and Olga Shvetsova. 2002. "Heresthetical Maneuvering on the US Supreme Court." *Journal of Theoretical Politics*. Vol. 14, #1: 93-122.

Gibson, James. 1997. *United States Supreme Court judicial database: Phase II*. ICPSR version. Houston, TX: University of Houston [producer], ICPSR, Ann Arbor, MI [distributor].

Hoekstra, Valerie and Timothy R. Johnson. 2003. "Delaying Justice: The Supreme Court's Decision to Hear Reargurments." *Political Research Quarterly*. Vol. 56, #3 (September): 351-360.

Johnson, Timothy R. 2001. "Information, Oral Arguments, and Supreme Court Decision Making." *American Politics Research*. Vol. 29, #4 (July):331-351.

Johnson, Timothy R. 2004. *Oral Arguments and Decision Making on the United States Supreme Court*. ISBN: 0-7914-6103-3. Albany, NY: SUNY Press.

Johnson, Timothy R., James Spriggs, and Paul Wahlbeck. 2005. "Passing and Strategic Voting on the U.S. Supreme Court." *Law and Society Review*. Vol. 39, #2 (June): 349-377.

Johnson, Timothy R., Paul J. Wahlbeck, and James F. Spriggs. 2006. "The Influence of Oral Arguments on the U.S. Supreme Court." *American Political Science Review*. Vol. 100, #1 (February): 99-113.

King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science*. Vol. 44, #2 (April): 347-361.

Maltzman, Forrest, James F. Spriggs II, and Paul J. Wahlbeck. 2000. *Crafting Law on the Supreme Court: The Collegial Game*. New York: Cambridge University Press.

Martin, Andrew D. and Kevin M. Quinn. 2002. "Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999." *Political Analysis*. 10: 134-153.

Palmer, Jan. 1982. "An Econometric Analysis of the U.S. Supreme Court's Certiorari Decisions." *Public Choice* Vol. 39, #3:387.

Puro, Seven. 1981. "The United States as Amicus Curiae." In Sidney Ulmer, ed., *Courts, Law and Judicial Processes*. New York: Free Press.

Salokar, Rebecca Mae. 1992. *The Solicitor General: The Politics of Law*. Philadelphia: Temple University Press.

Segal, Jeffrey. 1988. "Amicus Curiae Briefs by the Solicitor General During the Warren and Burger Courts: A Research Note." *Western Political Quarterly*. Vol. 41, #1 (March): 133-144.

Segal. Jeffrey. 1990. "Supreme Court Support for the Solicitor General: The Effect of Presidential Appointments." *Western Political Quarterly* Vol. 43. #1 (March):137-152.

Segal, Jeffrey. 1991. "Courts, Executives, and Legislatures." In *American Courts: A Critical Assessment*, ed. John B. Gates and Charles A. Johnson. Washington: Congressional Quarterly Press.

Segal, Jeffrey A., and Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. New York: Cambridge University Press.

Segal, Jeffrey A., and Albert D. Cover. 1989. "Ideological Values and Votes of U.S. Supreme Court Justices." *American Political Science Review*. Vol. 83, #2 (June): 557-65

Songer, Donald, and Reginald Sheehan. 1993. "Interest Group Success in the Courts: Amicus Participation in the Supreme Court. *Political Research Quarterly*. Vol. 46, #2 (June): 339-354.

Spaeth, Harold J. 2001. *United States Supreme Court Judicial Database, 1953-2000 Terms*. East Lansing, MI: Michigan State University.

Spriggs, James F., II, and Paul J. Wahlbeck. 1997. "*Amicus Curiae* and the Role of Information at the Supreme Court." *Political Research Quarterly*. Vol. 50, #2 (June): 365-386.

Stern, Robert L., Eugene Gressman, and Stephen M. Shapiro. 1993. *Supreme Court Practice: For Practice in the Supreme Court of the United States*. 7th ed. Washington D.C.: Bureau of National Affairs.

Woodward, Bob and Scott Armstrong. 1979. *The Brethren*. New York: Simon and Schuster.

Table 1: *Amici* participation in Supreme Court oral arguments (1953-1985)

Group	Number of cases in which *amicus* participates at oral arguments
United States	276
Securities and Exchange Commission	19
State of California	13
AFL-CIO	8
City of New York	7
National Labor Relations Board	5
American Civil Liberties Union	3
State of Oregon	3
State of Florida	3
Commodity Futures Trading Commission	3
State of Wyoming	3
State of Texas	3
State of Iowa	3
Federal Communications Commission	2
State of New Hampshire	2
American Arbitration Association	2
State of New Jersey	2
State of Washington	2
State of Alabama	2
National Association of Supervisors of State Banks	2
National Association of Food Chains	2
Chamber of Commerce of the United States of America	2
American Optometric Association	2
State of North Carolina	2
62 additional groups (see appendix for a list of them)	1
Total Number of Group Participation	433

Source: Gibson (1997)

Table 2: How *amici* gained permission to participate in oral arguments (1953-1985)

Who Granted Permission	Number of *amici* participating	Percent
The Litigant Granted Permission (or the Solicitor General Decided on its own) [a]	270	74.38
The Supreme Court Granted Permission	93	25.62
Total	363	100

[a] In the first category we include all cases where the Solicitor General participates without an invitation from the Court. This is a reasonable choice to make given Stern et al.'s (1993) argument that the Court simply does not deny the Solicitor General the ability to participate in a case as *amicus*. In short, if the Solicitor General wants to participate, he can do so – a decision that we consider is made exogenously from the Court. However, in those cases where the Court issues an invitation, the decision is endogenous, and we therefore put those cases (N = 49) in the category of Court permission. Also note that this total differs from Table 1 because it only includes *amici* whose ideological direction we could discern.

Table 3: Logit model of the effect of a*micus curiae* participation at oral arguments on the Supreme Court's decision to reverse (1953-1985)

Independent Variable	*All Cases* Coefficient (Std. Error)	*Civil Liberties Cases* Coefficient (Std. Error)	*Economics Cases* Coefficient (Std. Error)
Difference Between number of *Amici* asking for reversal versus Affirmance at Oral Arguments	0.682 (.133)***	0.568 (.185)**	0.745 (.260)**
Difference Between number of *Amicus* Briefs asking for Reversal versus Affirmance	0.095 (.020)***	0.110 (.030)***	0.122 (.040)**
Likelihood of Reversal	0.376 (.064)***	0.668 (.091)***	0.221 (.123)
Case Occurs in Warren Court	-0.051 (.063)	-0.071 (.092)	0.065 (.118)
Legal Salience	0.193 (.111)	-0.056 (.130)	1.08 (.350)**
Political Salience	0.053 (.085)	0.108 (.108)	-0.243 (.172)
Case Includes Multiple Legal Provisions	-0.145 (.076)	-0.397 (.101)***	-0.056 (.163)
Constant	0.406 (.059)***	0.367 (.079)***	0.372 (.113)***
Number of Observations	4635	2399	1354
Log-Likelihood	-2949.25	-1489.57	-870.35
Chi-Squared	105.47***	108.04***	33.81***

* $p \leq .05$ (one-tailed test) ** $p \leq .01$ (one-tailed test) *** $p \leq .001$ (one-tailed test)

Table 4: Predicted probabilities that more a*mici* supporting petitioner than respondent at *o*ral arguments leads the court to reverse (1953-1985)

Conditions	P (Y=reverse): 2 more amici supporting respondent at oral arguments (confidence interval)	P (Y= reverse) 2 more *amici* supporting petitioner at oral arguments (confidence interval)
All Cases	.36 (.24, .75)	.89 (.83, .94)
Civil Liberties Cases	.47 (.30, .66)	.89 (.80, .95)
Economics Cases	.46 (.34, .60)	.87 (.73, .96)

All variables are held at their mean or mode. We then vary the key variable between its smallest and largest values in the sample.

Table 5: Logit model of the effect of more liberal than conservative *amici* at oral arguments on individual Supreme Court justice's dispositive votes (1953-1985)

	All Cases	*Civil Liberties Cases*	*Economics Cases*
Independent Variable	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)
Difference Between Liberal and Conservative *Amici* at Oral Arguments	0.660 (.048)***	0.697 (.068)***	0.619 (.110)***
Total Number of Liberal *Amicus* Briefs Filed in a Case	0.056 (.008)***	0.061 (.011)***	0.080 (.018)***
Martin/Quinn Ideology Score	-0.293 (.005)***	-0.464 (.009)***	-0.180 (.010)***
Case Occurs in Warren Court	0.434 (.022)***	0.417 (.034)***	0.415 (.042)***
Legal Salience	0.971 (.040)***	1.386 (.051)***	-0.637 (.095)***
Political Salience	0.130 (.030)**	0.100 (.040)*	0.026 (.061)
Case Includes Multiple Legal Provisions	-0.076 (.026)**	-0.430 (.037)***	0.271 (.057)***
Constant	-0.175 (.017)***	-0.112(.024)***	0.139 (.034)***
Number of Observations	39,790	20,726	11,483
Log-Likelihood	-24,960.27	-11,775.75	-7356.57
Chi-Squared	4942.68***	5031.88***	638.71***

* $p \leq .05$ (one-tailed test) ** $p \leq .01$ (one-tailed test) *** $p \leq .001$ (one-tailed test)

Table 6: Predicted probabilities that more liberal than conservative *amicus* participation at oral arguments makes individual justices' dispositive votes more liberal (1953-1985)

Conditions	P (Y=1): 2 more conservative than liberal groups at oral arguments	P (Y=1) 1 more liberal than conservative groups at oral arguments
All Cases		
Most Conservative Justice (Martin/Quinn = 4.39)	.06	.32
Moderate Justice (Martin/Quinn = -.193)	.20	.64
Most Liberal Justice (Martin/Quinn = -6.71)	.62	.92
Civil Liberties Cases		
Most Conservative Justice (Martin/Quinn = 4.39)	.03	.20
Moderate Justice (Martin/Quinn = -.193)	.20	.67
Most Liberal Justice (Martin/Quinn = -6.71)	.84	.98
Economics Cases		
Most Conservative Justice (Martin/Quinn = 4.39)	.14	.50
Moderate Justice (Martin/Quinn = -.193)	.27	.69
Most Liberal Justice (Martin/Quinn = -6.71)	.54	.88

This table shows the predicted probabilities for the most conservative justice in our dataset (Martin/Quinn = 4.39), a moderate justice (Martin/Quinn = -.193), and the most liberal (Martin/Quinn = -6.71). All variables are held at their mean or mode. We then varied the key variable between its smallest and largest values for each justice in the dataset (by changing the Martin/Quinn variable).