The Supply of Amicus Curiae Briefs in the Market for Information at the U.S. Supreme Court

Thomas G. Hansford
School of Social Sciences, Humanities, and Arts, University of California, Merced, California

Kristen Johnson
Schwartz, Semerdjian, Ballard & Cauley LLP, San Diego, California

We argue that the Supreme Court’s expressed and latent demand for information on the availability and implications of legal policy alternatives will affect the supply of information provided to the Court by organized interests. An analysis of the annual growth in amicus filings at the Court during the 1949 through 2008 terms largely supports our specific hypotheses. The rate at which the Court cites amicus briefs and shifts in the Court’s ideological location or agenda exert a positive effect on the growth of amicus filings, while the evidence for the effect of dissensus is mixed. We further show that the supply of briefs does not affect the Court’s expressed or latent demand for information.

KEYWORDS: amicus curiae, information, Supreme Court, organized interests

One of the defining features of the modern U.S. Supreme Court is the heavy involvement of organized interests, typically through the filing of amicus curiae briefs. In the 2008 term, for example, 455 amicus briefs were filed by organized interests, broadly defined. These briefs allow interests to “lobby” the Court in an effort to influence the legal policy established by this key institution (Barker 1967). To this end, amicus curiae briefs contain arguments and information about the types of legal policies the Court could adopt and the likely implications of these policies. There is considerable variation, however, in the number of these briefs filed each term, meaning that there is an ebb and flow to this supply of interest-provided information.

What explains this longitudinal variation in the supply of amicus briefs? Prior work on the filing of these briefs models the decisions of specific organized interests to lobby the courts (e.g., Hansford 2004a; Scheppele and Walker 1991) and examines determinants of the number of briefs filed at the case level (Salzman, Williams, and Calvin 2011) but does not address the overall trends.
in this form of advocacy activity.\textsuperscript{2} We take a step back from this type of individual-level approach and adopt an institutional, macro-level vantage point in an effort to develop an explanation of the most basic aggregate-level pattern in organized interest lobbying of the Supreme Court—the variation in total volume of amicus curiae filings.

We forward a loosely market-based theory of lobbying in which organized interests are the suppliers of information and the Court is the consumer. The greater the Court’s demand for information, the more the Court will “pay” for this information by implicitly granting a degree of influence over its policy, and the more interests will supply information by filing amicus curiae briefs. In our stylized account, the Court’s demand drives the supply of amicus briefs, but we also test whether the causal arrow might point the other direction.

By furthering our understanding of the overall levels of interest involvement at the Court, this research touches on issues central to the study of U.S. judicial institutions. According to Epstein (1991, 354), explaining longitudinal variation in organized interest involvement at the Supreme Court “might reveal a great deal about the Court as an evolving institution.” Organized interest involvement particularly highlights the political component of the Court’s institutional development. Furthermore, the amount of interest activity at the Court has implications for the general information environment in which the Court operates when making critical decisions on the meaning of the Constitution or the application of federal laws.

This study also seeks to contribute to the emerging, broader literature on the supply of and demand for lobbying, which has been somewhat hamstrung by data limitations. Studying aggregate trends in amicus curiae brief filings provides information about the dynamics of organized interest lobbying efforts that may be difficult to obtain in the context of other political institutions. Amicus curiae briefs represent lobbying efforts that can be readily observed over a substantial time span, unlike organized interest contacts with legislators or bureaucrats.\textsuperscript{3}

We begin with a theoretical discussion of the Supreme Court’s need for information and the potential for organized interests to supply this information. We then identify a readily observable signal of the Court’s expressed demand for information—the rate at which the Court cites amicus curiae briefs—and hypothesize that increases in this signaled demand should lead to a greater supply of these briefs. We further argue that policy shifts at the Court, be it changes to the position of the median justice or changes to the agenda, and dissensus among the justices will also increase the supply of amicus curiae briefs since they indicate a latent demand for information.

We test this argument with aggregate data on amicus curiae brief filings in the U.S. Supreme Court’s annual terms, from 1949 through 2008. The results of our analysis largely support our demand-based hypotheses. Finally, we assess the possibility that the supply of amicus curiae briefs might also affect potentially endogenous indicators of the Court’s demand for information. The results of this final analysis indicate that variation in the growth of organized interest activity has little effect on either the rate at which the justices reference amicus briefs or dissensus on the Court. It thus appears that indicators of the Court’s demand for information drive the supply

\textsuperscript{2}Hansford (2011) examines aggregate patterns in the filing of amicus briefs but does so only in the context of testing whether organized interests on one ideological “side” appear to respond to the filings of their opponents.

\textsuperscript{3}For example, Leech et al. (2005) and Baumgartner et al. (2011) examine aggregate levels of organized interest activity in Washington, D.C., but only for very short time spans. As Gray et al. (2005) note, this research design allows for substantial variation across issues but not across time. While Gray et al.’s study provides additional cross-sectional variation through its focus on state-level lobbying efforts, it provides no longitudinal component at all.
of amicus briefs. We then conclude with a brief discussion of the implications for the Court’s institutional development and our understanding of the dynamics of informational advocacy activities.

THE SUPREME COURT’S DEMAND FOR INFORMATION

When Supreme Court justices decide cases and author precedent-setting legal opinions, evidence suggests they seek to shape legal policy in a manner congruent with their policy preferences (Epstein and Knight 1998; Hansford and Spriggs 2006; Maltzman, Spriggs, and Wahlbeck 2000; Segal and Spaeth 2002). The justices do not have complete information, though, on the set of feasible legal policies or the ultimate effect that these policies or precedents would have. How will lower court judges use a particular precedent? Will Congress be provoked into attacking the precedent? More generally, will a given decision lead to any unintended consequences? To the extent that the justices cannot innately know the answers to these questions, they will want to obtain information that will assist in formulating such answers.

Indeed, the justices should have a greater demand for externally provided information than legislators, as there is far less policy specialization at the Court than in, for instance, Congress. Members of Congress can rely on committees and subcommittees to act as informed policy specialists (Krehbiel 1991) while there is no equivalent specialization on the Supreme Court. The justices are policy generalists who simply have far less opportunity and incentive to specialize than members of Congress.

ORGANIZED INTERESTS AS INFORMATION SUPPLIERS

Who supplies information to the justices when they are deciding cases? Sources of information guaranteed by the legal process include the attorneys representing the litigants, through their briefs and oral argument (Corley 2008; Johnson, Wahlbeck, and Spriggs 2006; McGuire 1995), and the relevant lower court judges, through their legal opinions (Corley, Collins, and Calvin 2011). Organized interests can also opt to provide the Court with information, though, by filing amicus curiae briefs containing information above and beyond that provided by the litigants (Collins 2008a; Spriggs and Wahlbeck 1997). This information can be legalistic, policy-oriented, or about the preferences of other governmental entities (Collins 2008a; Epstein and Knight 1999). These briefs can also reveal the likely impact of a ruling (Barker 1967) or provide scientific/technical information to the justices (Breyer 1998). 5

Though they may also consider organizational maintenance issues when choosing to file amicus briefs, interests are motivated to supply information to the Court because they desire to favorably influence the Court’s decisions or legal precedents. There is evidence that the information and arguments that interests provide to the Supreme Court in their amicus briefs can influence the

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5This is not to say that there is no specialization on the Court whatsoever. Patterns of opinion assignment indicate a degree of policy specialization (Maltzman, Spriggs, and Wahlbeck 2000).

5The mere presence of amicus curiae briefs, regardless of their content, may also provide information to the Court (Caldeira and Wright 1988).
Court’s agenda (Caldeira and Wright 1988), decisions on the merits (Collins 2008a; Kearney and Merrill 2000), and majority opinions (Epstein and Kobylka 1992; Spriggs and Wahlbeck 1997). Further still, the justices themselves acknowledge the potentially important informational role played by amicus curiae briefs (Breyer 1998).

A DEMAND-DRIVEN VIEW OF THE SUPPLY OF INFORMATION AT THE COURT

Justices demand information and control the Court’s policies. Organized interests can supply information and seek to influence Court policy. These interests can thus supply the Court with information in return for the prospect of some degree of influence over the Court’s decisions or precedents. Note that this stylized market-based view of the lobbying of the Court does not imply that substantial policy influence is being explicitly offered as a form of payment for interest-provided information. It may take only a very slight degree of actual influence or the implicit prospect of a degree of influence to secure a supply of information from organized interests. The key point is that there is an exchange of information for some possibility of marginal influence over legal policy. Without this possibility of influence, it is unlikely that many organized interests would file amicus curiae briefs as this is not a costless activity on their part (Caldeira and Wright 1988).

We are concerned here with the supply side of this market for information at the Court, meaning that we seek to explain variation in the total supply of amicus-provided information. We are particularly interested in how variation in the Court’s demand for information might influence the supply of amicus brief filings. In a classic market, of course, exogenously determined increases in demand for a good lead to higher prices, which, in turn, increase the supply of the good. To the extent that there is a market for information at the Court, increases in the Court’s demand should increase the prospect of organized interests influencing the Court’s policy outputs—i.e., the “price” paid for information. In turn, this should increase the supply of information-containing amicus briefs. There is case-level evidence of precisely this sort of response by organized interests to the Court’s need for information (Hansford 2004b; Salzman, Williams, and Calvin 2011).

How do organized interests know the degree to which the Court demands information? Practically speaking, the Court cannot openly negotiate the amount of influence it will concede in return for information. To do so would be viewed as highly inappropriate or unethical. Instead, organized interests will be attentive to both explicit signals of the Court’s demand for information as well as indicators of the Court’s latent demand for information. As we discuss below, the Court’s explicit signals of demand for amicus-provided information are just that—easily observed indications that the Court consumes, and thus may be influenced by, the information provided by amici. The Court’s latent demand for information refers to the Court’s underlying need for information, which varies according to the extent to which the Court may be considering changes to the legal status quo. As it requires information about policy alternatives and the implications

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6It is possible that this influence could be a result of a there being a mix of intentional misinformation in these briefs. That is, the Court may be willing to accept and act on some degree of misinformation as long as interests are mostly providing genuine information. In this sense, the acceptance of some degree of misinformation could be viewed as the “price” paid by the Court.
of these alternatives, policy change may necessitate more in the way of new information than a simple maintenance of the status quo. Put differently, the prospect of policy change incentivizes organized interests to provide information to the relevant policy makers (Gray et al. 2005; Hansford 2004b).

**Signaling Demand for Amicus-Provided Information**

One admittedly crude but yet clear and easily observed signal of the Court’s demand for amicus-provided information is the degree to which the arguments and information provided by amicus curiae briefs are explicitly referenced and incorporated into the Court’s majority opinions. The more the Court’s majority opinions cite amicus briefs, the more organized interests should perceive a demand for amicus-provided information at the Court. This perception of demand should then increase the expectation of having a degree of influence. This is not to say that every citation to an amicus curiae brief should be treated as concrete evidence of influence. Indeed, it has proven quite difficult for researchers to identify the extent to which organized interests influence policy outcomes (Baumgartner and Leech 1998), and this difficulty extends to discerning the causal relationship between amicus briefs and court decisions (but see Collins 2008a; Spriggs and Wahlbeck 1997). However, citations to amicus curiae briefs are reasonable, easily observed indicators of the extent to which the Court is interested in and possibly influenced by the information provided in amicus curiae briefs. We thus expect that increases in the Citation Rate should increase the filing of amicus curiae briefs.

We should point out that our argument that organized interests will respond to citation-based signals of demand from the Court dovetails with Baird’s (2004) research on how the Supreme Court signals demand for certain kinds of cases. Specifically, Baird finds that when the Court issues a salient decision in a particular issue area, it signals demand for cases in this issue area. These signals of demand then lead to subsequent, related litigation in the federal courts, some fraction of which ultimately ends up before the Court. The only real difference between our argument and hers is that the former is concerned with the demand for information, while the latter explains demand for cases within specific issue areas. More generally, a growing body of interest-group research reveals that governmental actions tend to influence the volume of lobbying activity by signaling demand for information (e.g., Baumgartner et al. 2011; Leech et al. 2005).

**Indicators of the Court’s Latent Demand for Information**

In addition to this citation-based signal of the Court’s demand for information, we also expect the supply of interest-provided information to be sensitive to indicators of the Court’s latent demand.

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7 Given that precedent is set by the Court’s majority opinions, it is references to amicus briefs in these opinions that should most clearly signal the possibility of influence. Nonetheless, it could be the case that organized interests respond to citations to amicus briefs in the Court’s separate opinions. As detailed in footnote 28, we explore this possibility and find that our focus on citations in majority opinions is warranted.

8 It is entirely possible that majority opinion authors sometimes use the information provided in an amicus curiae brief without citing the brief. We contend that organized interests are more likely to respond to cited rather than non-cited references to briefs, because the latter is more difficult to observe.
for information. The prospect of legal change at the Court should increase the Court’s demand for information. When the Court considers shifting away from any sort of legal policy equilibrium or moving into a new issue area, the justices need to be aware of the alternative legal policies that could be feasibly adopted and their likely implications (Collins 2008a). Organized interests can provide this sort of information. For example, Epstein and Knight (1998) detail the importance of an amicus curiae brief filed by the ACLU in one of the Court’s first forays into applying the Equal Protection Clause to laws that discriminate along gender lines. The ACLU’s brief proposed a new level of scrutiny (heightened or intermediate scrutiny) for this type of Equal Protection challenge, and the Court ultimately adopted this position.

The argument we make here is consistent with Gray et al.’s (2005) conclusion that uncertainty about the type of policies that a state government will adopt implies a greater demand for information and increases organized interest activity at that level of government. The possibility of policy change implies that interest-provided information could be particularly useful to policy makers, which allows for the possibility of influencing these policy makers and thus increases the lobbying efforts of organized interests.

We forward three specific indicators of the manifestation or prospect of policy change on the Court that should suggest a latent demand for information and thus increase the supply of amicus curiae briefs. Shifts in the policy preferences of the justices are the most obvious predictor of policy change on the Court. Given the importance of these preferences for both the Court’s decisions on the merits (Segal and Spaeth 2002) and its precedents (Clark and Lauderdale 2010; Hansford and Spriggs 2006), when these preferences change due to new appointments to the Court or ideologically drifting justices, it is likely that the Court’s decisions and precedents will change accordingly. This expectation of policy change and the accompanying need for information about policy options and implications thereof should increase the supply of information to the Court. We thus hypothesize that Preference Shifts on the Court will increase the filing of amicus curiae briefs. Note that the direction of the shift in judicial preferences is inconsequential here. Any meaningful change to the preferences of the justices implies the possibility of policy change and thus should increase the total volume of amicus briefs.9

Policy change at the Court is not due solely to changes in the ideological location of the justices. The type of issue the Court considers is as important as how these issues are resolved; thus shifts in the Court’s agenda are another form of policy change or instability (see Pacelle 1991). Entering into new legal issue areas, or at least expanding an issue area’s footprint on the docket, should cause a need for additional information on the Court. The suppliers of this information will react accordingly and increase their amicus filings when there are Agenda Shifts. Again, the direction of an agenda shift is inconsequential. Changes in the Court’s agenda generically signal the possibility of policy change and thus should increase the total volume of amicus briefs.

The final indicator of policy instability at the Court is the level of dissensus at this institution. Dissensus on the Court is expressed through closely decided cases and numerous separate opinions—both of which imply the potential for shifting outcomes. Cases decided by 5–4 margins, for instance, indicate a divided Court on which moving a single justice’s position might lead to fundamentally different outcomes. There is evidence, in fact, that the level of dissensus associated with a Supreme Court precedent affects the probability of it being subsequently overruled by the

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9We do not examine here the possibility that the type of interest filing briefs at the Court might change in response to changes in the preferences of the justices or the Court’s agenda (see Hansford 2004a).
Court (Spriggs and Hansford 2001). The prospect of policy change on the Court implies that the justices are in greater need of information about the availability and likely consequences of new legal rules. As an indicator of the Court’s latent demand for information, we expect *Dissensus* to increase the filing of amicus curiae briefs at the Court.\(^{10}\)

In sum, we take a market-based view of the lobbying of the Court in which information about the availability and consequences of legal policy alternatives is demanded by the justices and supplied by organized interests. We want to explain the supply side of this market and focus on how the Court’s demand influences the supply of interest-filed amicus curiae briefs. The rate at which the Court cites amicus curiae briefs is an observable proxy for the extent to which these briefs have some degree of influence and can be considered as a signal of the Court’s demand for this information. Increases in this demand should increase the supply of information via the filing of amicus briefs. Indicators of the Court’s latent demand for information should also affect the supply of amicus briefs. We contend that this latent demand is a function of changes to the Court’s policy positions and agenda, as well as the level of dissensus exhibited in its decisions.

### POTENTIAL ISSUES WITH OUR DEMAND-DRIVEN THEORY

Our demand-based explanation of the supply of amicus briefs raises four possible issues, the first of which is that there may be a bit of a lag between an indicated change in the Court’s demand for information and a resulting change in the supply of amicus briefs. Organized interest lobbying activities and tactics can exhibit a good deal of inertia (Walker 1991), making it likely that responsiveness to changes in demand is not entirely instantaneous. Our empirical analysis will allow for this type of lagged response in the supply of amicus curiae briefs.

Second, we assume, at least for now, that the demand-side of the market for information at the Court can be considered exogenous to supply (i.e., uninfluenced by the amount of information supplied). We make this assumption in part because it is consistent with recent work on lobbying, which assumes, often implicitly, that governmental demand for lobbying precedes and determines the amount of lobbying by organized interests (e.g., Baumgartner et al. 2011; Gray et al. 2005; Leech et al. 2005). In addition, several of the demand-side variables we ultimately put forward as explaining the supply of amicus curiae briefs can be reasonably considered as exogenous. Nonetheless, we will later revisit this exogeneity assumption to assess whether the supply of briefs might also affect at least some components of the Court’s indication that it needs information.

A third issue about which we should be clear is that we choose not to focus on a likely predictor of the supply of amicus briefs at the Court at a given point in time, and that is the size of the organized interest population at that time. The number of organized interests has increased over time (see Baumgartner and Leech 1998), and it is likely that this increase in the number of interests has led to an increase in the volume of amicus curiae briefs filed at the Court. Unfortunately, we cannot directly control for the size of the organized interest population because there is no simply

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\(^{10}\)Collins (2008b) suggests that amicus curiae briefs might cause dissensus at the Court, a possibility we consider below.
source providing an annual count of all organizations seeking to influence governmental policy over the six decades we analyze.\textsuperscript{11}

We account for the potential consequences of this supply-side trend by converting our raw amicus curiae data into growth rates, thus removing the general over-time increase in briefs. An over-time increase in the size of this population should not correlate with the rate of growth in the number of amicus briefs filed (which is mean stationary over time). Furthermore, there is no reason to expect the size of the organized interest population to correlate with any of our independent variables. Thus, it seems unlikely that our inability to control for the size of the organized interest population will lead to omitted variable bias.

Finally, while we are focused here on the Court’s demand for information, we acknowledge that there are likely many other considerations that could contribute to the ebb and flow of amicus involvement at the Court. For example, interests could respond to the amicus filings of opponents (Hansford 2011; Solowiej and Collins 2009). There is also a good deal of theory and evidence suggesting that organized interest lobbying efforts may be shaped in part by organizational maintenance concerns (e.g., Moe 1980; Olson 1965). It is not clear, though, how organizational maintenance concerns might help us understand longitudinal variation in the overall volume of amicus activity at the Court. Furthermore, our goal here is not to develop an exhaustive list of variables that might influence amicus filings, but instead to develop and test our information-demand driven model of the volume of lobbying activity at the Court.

\section*{DATA AND METHODS}

To test the hypotheses laid out above, we assembled data on the amicus curiae briefs filed on the merits of U.S. Supreme Court cases during its annual terms from 1946 to 2008.\textsuperscript{12} Following Gibson’s (1997) coding rules, we exclude from our data briefs filed by individuals qua individuals. Our dependent variable thus includes all amicus curiae briefs filed by organized interests, broadly defined to include, for example, public interest groups, businesses, unions, and governmental entities. As we are interested in the over-time dynamics of the market for information at the Court, the unit of analysis is the Supreme Court term. To be clear, our goal here is to explain changes in organized interest “lobbying” of the Court at this high level of aggregation. We do not seek to examine variation in the lobbying efforts of subpopulations of interests.\textsuperscript{13}

With the lags that we introduce into our model, the time span we ultimately utilize for estimation purposes ranges from the 1949 term to the 2008 term. Figure 1a depicts the raw number of amicus curiae briefs filed during this period. There are two issues with this time series. First, we need to

\footnote{Research indicates that GDP may serve as a rough proxy for the size of the organized interest population (Bischoff 2003; Lowery et al. 2004). In a supplementary analysis, we estimated our model while including growth in GDP (inflation-adjusted). The estimates for this variable (at \( t \), \( t-1 \), and \( t-2 \)) are individually and jointly insignificant. Moreover, the inferences regarding our other independent variables change very little as a result of the inclusion of this variable.}

\footnote{For amicus curiae brief filings from the 1953 to 1985 terms, we rely primarily on Gibson (1997). We utilized the United States Reports and Lexis to gather data on the briefs filed during the 1946 to 1952 and 1986 to 2008 Court terms.}

\footnote{Moreover, it would be prohibitively time-consuming to reliably categorize all of the interests that have filed briefs over the 60 terms we analyze. We do, however, replicate the model in Table 1 while excluding amicus briefs filed by the U.S. Solicitor General. The results are very similar, which is not surprising given that dependent variables in these two analyses (with and without the Solicitor General’s briefs) are very highly correlated (\( r = .98 \)).}
a. Raw Number (Levels)

![Graph showing the raw number of amicus curiae briefs filed on the merits at the U.S. Supreme Court from 1949 to 2008 terms.]

b. Growth Rate

![Graph showing the growth rate of amicus curiae briefs filed on the merits at the U.S. Supreme Court from 1949 to 2008 terms.]

FIGURE 1  Amicus Curiae Briefs Filed on the Merits at the U.S. Supreme Court, 1949 to 2008 Terms. Raw Number (Levels), b. Growth Rate.
account for the fact that the number of briefs filed likely depends on the size of the Court’s docket in a given term. Second, a cursory examination of this time series reveals a marked increase in the number of briefs through much of this time span. Formal tests lead to the conclusion that this time series is certainly not stationary and may be integrated (I(1)). To address these two issues, we transform this series into the rate of growth in the number of amicus briefs filed per Court case. In growth rates, amicus briefs per case are mean stationary (I(0)), which also minimizes any worry associated with modeling a non-stationary dependent variable and also addresses the potential problem of not controlling for the increasing size of the organized interest population during this time period. Amicus Brief Growth will therefore serve as the dependent variable in our statistical model, and it is presented in Figure 1b.

**Independent Variables**

Our hypotheses point toward the inclusion of four independent variables in our model explaining Amicus Brief Growth. All four of these independent variables are stationary and are thus not transformed in any manner. To allow for the possibility that there could be a somewhat delayed response in the supply of amicus briefs to changes in the Court’s demand for information, we include a lag for each of these independent variables. Specifically, we include each variable at \( t \) and \( t-1 \), or \( t-1 \) and \( t-2 \), depending on whether the variable is appropriately included at time \( t \).

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14 A Dickey-Fuller test does not allow us to reject the null that Amicus Briefs has a unit root (I(1)). A KPSS test clearly allows us to reject the null that Amicus Briefs is stationary.

15 The specific transformation we perform is: \( \text{Amicus Brief Growth}_t = 100 \times \frac{\text{Briefs}_t / \text{Cases}_t - (\text{Briefs}_{t-1} / \text{Cases}_{t-1})}{\text{Briefs}_{t-1} / \text{Cases}_{t-1}} \)

16 We do not simply difference Amicus Briefs because the differenced version of this variable has a variance that increases dramatically over the time period. By using the growth rate, our dependent variable is variance stationary.

17 We conducted a series of joint hypothesis tests (using likelihood ratio tests) to determine lag length. When we add the first lag of each independent variable to the model (i.e., adding a lag of \( t-1 \) for variables initially introduced at \( t \) and \( t-2 \) for variables initially introduced at \( t-1 \)), a likelihood ratio test reveals that the estimates for this set of additional lagged variables are jointly significant (\( p = .002 \)). If we then add an additional lag for each independent variable (i.e., adding a lag of \( t-2 \) for variables initially introduced at \( t \) and \( t-3 \) for variables initially introduced at \( t-1 \)), a likelihood ratio test reveals that the estimates for this set of additional lagged variables are not jointly significant (\( p = .17 \)). The individual estimates for the additional lags of Agenda Shifts and Dissensus are statistically significant, though. We decline to include the additional lags for these two variables because doing so requires the loss of yet another observation, further clutters the model, and the fundamental inferences remain the same; Agenda Shifts and Dissensus increase the rate of growth of amicus curiae filings at the Court (and none of the inferences regarding the other independent variables change as a result of the inclusion of these additional lags).

18 To assess whether the inclusion of each independent variable at two points in time leads to a multicollinearity issue, we regressed each independent variable (at \( t \), \( t-1 \), or \( t-2 \) on all the other independent variables (at both lags) and examined the resulting \( R^2 \) statistics. This diagnostic reveals little correlation between any given independent variable and the combination of its lag/lead and the remaining set of independent variables. The largest \( R^2 \) we find occurs when we treat Membership Change, as a dependent variable, but even then the \( R^2 \) is a relatively modest .225. Furthermore, the
To determine the rate at which the Court is explicitly referencing amicus briefs (Citation Rate), we conducted a word search in Lexis and located all mentions of amicus curiae briefs in the Supreme Court’s majority opinions.\textsuperscript{20} For each term, we counted the number of sentences in majority opinions that explicitly refer to one or more amicus curiae briefs. Since the number of references to amicus briefs will be partially a function of the number briefs filed, we divide the number of references in a term by the tens of amicus briefs filed that Court term. The resulting measure is thus the number of references per ten amicus curiae briefs. Since the Court’s references to briefs occur \textit{after} the briefs have been filed, it would be theoretically inappropriate to include Citation Rate at time $t$. Instead, our model includes Citation Rate at times $t-1$ and $t-2$.

\textit{Preference Shifts} are measured by taking the absolute value of the difference between the ideological position of the median justice at time $t$ and the position of the median justice in the previous Court term (i.e., time $t-1$). Anderson and Tahk (2007) demonstrate that the position of the median justice is a reasonable measure of the location of the Court as an institution. We use the Martin and Quinn (2002) scores as our measure of justice ideology. In the model, Preference Shifts are included at times $t$ and $t-1$.\textsuperscript{21}

To measure \textit{Agenda Shifts}, we begin by calculating, for each Court term, the percentage of Supreme Court cases falling into each of Spaeth’s (2010) twelve broad issue areas.\textsuperscript{22} We then compute the absolute values of the changes, from $t-1$ to $t$, in the percentage of cases falling in each value area. Finally, we take the average of these changes for a given term and use that as our measure. Agenda Shifts thus reveals the extent to which the type of issues the Court confronts changes from one term to another. We include this variable in our model at times $t$ and $t-1$, since the Court’s agenda decisions precede the filing of amicus curiae briefs on the merits of these cases.\textsuperscript{23}

\begin{itemize}
  \item The inclusion of Membership Change in our model does not affect the inferences we make. In sum, there is no evidence that multicollinearity poses a meaningful problem for our model.
  \item Specifically, we searched majority opinions for “amicus” or “amici.” When the Court specifically references a brief, it almost always identifies the type of entity that filed it (e.g., petitioner, respondent, or amicus curiae). Not all citations to amicus briefs come with an equal amount of apparent influence. A content analysis of the nature of the more than 2,300 references to amicus briefs over the decades analyzed here is well beyond the scope of this study, however. Though not every reference to an amicus brief can be taken as an indication of influence, on average variation in this rate should reveal the extent to which the Court is incorporating amici-provided information and arguments into its majority opinions. We do not include citations to amicus briefs in separate opinions, as these opinions cannot be formally considered to be the Court’s policy.
  \item Though this measure is based on votes that largely occur after briefs have been filed in a given term, the underlying, latent variable we care about—the location of the median justice and how this has shifted from the previous year—should largely be known by organized interests before the Court term starts since substantial shifts to the median justice will be determined by new appointments to the Court. Such new appointments will generally have a predictable effect on the location of the median for the new term. Note that if we exclude Preference Shifts from our model, then the estimate for Membership Change is positive and statistically significant. If we alternatively estimate our model while including Preference Shifts at $t-1$ and $t-2$, the estimates for these lags are positive and significant.
  \item We exclude Spaeth’s “miscellaneous” value area.
  \item A second possible agenda-related consideration is that regardless of change to the Court’s agenda, there are certain issue areas that attract higher levels of organized interest involvement. To test whether variation in the Court’s attention to various issue areas explains the rate of growth in amicus filings, we estimated our model while including twelve additional variables, one for each of Spaeth’s broad issue areas (e.g., there is a variable for percentages of cases in term $t$ which are categorized as First Amendment cases). None of the estimates for these issue allocation variables are statistically significant. Furthermore, the estimates are not jointly significant, and our inferences regarding the independent variables of interest are largely unaffected when these issue variables are included.
\end{itemize}
Our measure of the level of Dissensus on the Court relies on three separate indicators: the average number of special concurring opinions per case at time $t$, the average number of dissenting opinions per case at $t$, and the percentage of the Court’s decisions reached by minimum winning or evenly split coalitions at $t$.24 Using factor analysis, we distill these three indicators into a single variable—Dissensus.25 As expected, all three indicators load positively onto Dissensus. Thus, larger values of this variable correspond with higher levels of expressed disagreement on the Court. Because Dissensus is formulated with characteristics of the Court’s decisions in a given term, it cannot properly be included in our model at time $t$ (since the filing of amicus briefs precedes the Court’s decisions on the merits). We therefore include this variable at times $t-1$ and $t-2$.

To account for any mean-reverting tendencies in our dependent variable, we include Amicus Brief Growth$_{t-1}$ and Amicus Brief Growth$_{t-2}$ in the model. It is possible that changes to the Court’s membership, even if these changes do not move the location of the median justice, might be viewed as increasing the possibility of policy change on the Court. We thus include Membership Change as a control variable (at time $t$ and $t-1$) and define it as the number of new appointees on the Court (i.e., number of first-year justices).26

RESULTS

The results of the OLS estimation of our model explaining the annual growth in amicus curiae filings per Supreme Court case are presented in Table 1. Model fit statistics are encouraging. An F-test allows us to reject the null hypothesis that our set of independent variables has no explanatory power. Furthermore, the $R^2$ of 0.629 reveals that our model explains a majority of the variation in Amicus Brief Growth, which, in turn, suggests that our transformed dependent variable is not idiosyncratic or unexplainable.

We argue that the supply of amicus briefs will depend on the Court’s demand for information. The results of our model estimation provide a good deal of support for this argument. To begin, the two estimates for Citation Rate are positive and jointly significant, as we expect.27 The estimate for Citation Rate$_{t-2}$ is also individually significant. Increases in the rate at which the Court references

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24These data are derived from Spaeth (2010).

25If we run separate models, each with one of the individual indicator of dissensus, the results for the percentage of minimum winning decisions and the average number of dissents are stronger than those for the average number of special concurring opinions, which makes sense given that the latter does not load as strongly onto the dissensus factor.

26Organized interest activity at the Court could be influenced by the partisan control of the other branches of government. We test two possibilities. First, we simply include in our model a dummy variable indicating unified government (presidency and both chambers Congress controlled by the same party). The existence of unified government could cause organized interests shut out by the governing party to pursue their agendas at the Court. The estimates for this variable are not statistically significant (at either time $t$ or $t-1$), and its inclusion does not alter our substantive inferences. Second, we test the importance of changes in the control of the other branches by including a variable that indicates whether the House, Senate, or presidency changed in terms of partisan control at time $t$. It could be the case that shocks to the control of the other branches increase interest involvement in those branches at the expense of involvement at the Supreme Court. The estimates for this variable (at $t$ and $t-1$) also fail to attain statistical significance, though its inclusion would lead us to fail to reject the null for Dissensus$_{t-2}$. As mentioned below, we view the results for Dissensus as less robust than the results for the other independent variables.

27An F-test for the two coefficient estimates reveals they are jointly significant ($p \leq .05$).
### TABLE 1
Model of the Annual Growth in Amicus Curiae Brief Filings at the U.S. Supreme Court, 1949–2008 Terms

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient Estimate (Newey-West Standard Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amicus Brief Growth$_t-1$</td>
<td>$-0.747^\dagger (0.095)$</td>
</tr>
<tr>
<td>Amicus Brief Growth$_t-2$</td>
<td>$-0.281^\dagger (0.107)$</td>
</tr>
<tr>
<td>Citation Rate$_t$</td>
<td>$7.62 (4.59)$</td>
</tr>
<tr>
<td>Citation Rate$_t-2$</td>
<td>$15.9^\ast (4.64)$</td>
</tr>
<tr>
<td>Preference Shifts$_t$</td>
<td>$49.1^\ast (16.7)$</td>
</tr>
<tr>
<td>Preference Shifts$_t-1$</td>
<td>$28.6^\ast (14.5)$</td>
</tr>
<tr>
<td>Agenda Shifts$_t$</td>
<td>$0.582^\dagger (0.256)$</td>
</tr>
<tr>
<td>Agenda Shifts$_t-1$</td>
<td>$0.564^\ast (0.300)$</td>
</tr>
<tr>
<td>Dissensus$_t-1$</td>
<td>$1.62 (4.63)$</td>
</tr>
<tr>
<td>Dissensus$_t-2$</td>
<td>$6.21^\ast (3.32)$</td>
</tr>
<tr>
<td>Membership Change$_t$</td>
<td>$3.27 (5.45)$</td>
</tr>
<tr>
<td>Membership Change$_t-1$</td>
<td>$-0.513 (4.50)$</td>
</tr>
<tr>
<td>Constant</td>
<td>$-70.0^\dagger (14.2)$</td>
</tr>
<tr>
<td>N</td>
<td>60</td>
</tr>
<tr>
<td>F (12, 47)</td>
<td>10.5$^\ast$</td>
</tr>
<tr>
<td>R$^2$</td>
<td>0.629</td>
</tr>
</tbody>
</table>

Note. $^\ast p \leq 0.05$ (one-tailed test, for hypothesized relationships).  
$^\dagger p \leq 0.05$ (two-tailed test, for estimates for the lags of the dependent variable and constant). The dependent variable is the percentage growth in the number of amicus curiae briefs filed per case from one annual Court term to another.

amicus briefs subsequently increase the rate at which amicus curiae filings increase.  

A one-unit increase in the number of majority opinion references to amicus briefs (per ten briefs filed) leads to nearly a 16 percent growth in the number of amicus briefs filed per case two years later.

The two estimates for Preference Shifts are positive and statistically significant, both jointly and individually. We hypothesize that changes to the ideological location of the median justice portend changes to the Court’s decisions and precedents, which implies an additional demand for information about alternative policies and their downstream implications. Organized interests appear to respond to this indicator of the Court’s likely need for information and increase their amicus curiae brief filings when the median justice’s location moves. Specifically, a one-standard deviation change in the location of the median justice on the Martin and Quinn metric of judicial ideology leads to an immediate 9.4 percent growth in the number of amicus briefs filed per case in the Court term under analysis. There is an additional delayed effect, too, as indicated by the estimate for the one-year lag of this independent variable. Regardless of whether the Court is moving in a conservative or liberal direction, change in the location of the median justice increases Amicus Brief Growth for the term witnessing this preference change and for the subsequent term. Thus, new appointments to the Court who shift the position of the median justice can have the

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28 To test whether citations to amicus briefs in the Court’s separate opinions might also increase the filing of briefs, we constructed a second citation rate variable based solely on these citations in dissenting and concurring opinions. When included in the model, the estimates for this variable (which is included at $t-1$ and $t-2$) are not statistically significant, suggesting that only citations in majority opinions signal demand for briefs.

29 Citation Rate has a mean and standard deviation of 1.3 and 0.6, respectively.

30 Preference Shifts has a mean and standard deviation of .184 and .192, respectively.
unintended consequence of increasing organized interest activity. On the other hand, long periods of stable membership or new appointments who are ideologically similar to the justices who they replace will not increase organized interest activity at the Court, all else equal.

The results for Agenda Shifts are also generally supportive of our argument. Both estimates are in the predicted direction, and they are individually and jointly significant. The more the Court reshuffles its agenda for a given term, the greater the rate at which amicus curiae filings increase for that term and the subsequent term.\(^{31}\) We contend this is due to the potential for policy change indicated by the Court altering its policy agenda.

The results for Dissensus are somewhat consistent with our hypothesis. Both estimates are positive, though only the estimate for Dissensus at t-2 is statistically significant. It thus appears that increases in the level of expressed dissensus on the Court may increase the rate of growth of amicus filings, though with a bit of a lag. It should be pointed out, though, that the results for this independent variable are sensitive to model specification and thus should be viewed with some caution.\(^{32}\)

Turning to the control variables, the estimates for the lags of the dependent variable are negative and significant. Increases in the growth rate in one term partially decay in the following two terms. The estimates for Membership Change are not statistically significant, implying that membership changes on the Court that do not move the position of the median justice have no effect on the growth of amici filings. This null result is consistent with what Salzman, Williams, and Calvin (2011) find when examining amicus activity at the case level.

Given the presence of multiple lags for each independent variable and the inclusion of the lagged dependent variables, it is worth considering the total dynamic effect of the independent variables on the rate at which amicus filings are increasing at the Court. With this in mind, Figure 2 presents impulse response functions (IRFs) for Citation Rate, Preference Shifts, Agenda Shifts, and Dissensus. Each IRF displays the effect of a one standard deviation increase in the independent variable (at \(t = 1\)) on the annual growth in the average number of amicus briefs filed per Court case. This impulse in the independent variable exists only for the first term; thus all the subsequent effects on the dependent variable are attributable to this one-time "shock."

The first of these four IRFs reveals that Citation Rate has a modest positive effect on the annual growth in amicus filings in the first term following the one-standard deviation shock and then a larger positive effect in the next term. From that point on, the negative coefficients on the lagged dependent variables take over, causing alternating, diminishing increases and decreases in the dependent variable. The effect of Preference Shifts, in contrast, is large and exclusively immediate.\(^{33}\) Agenda Shifts exerts a somewhat smaller immediate effect on the annual growth in amicus briefs filed. The effect of Dissensus follows a similar pattern to that of Citation Rate, though the effect sizes are considerably smaller.

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\(^{31}\)Agenda Shifts has a mean and standard deviation of 36.5 and 11.3, respectively.

\(^{32}\)See footnotes 17 and 25.

\(^{33}\)The positive coefficient for the lagged version of this independent variable and the negative coefficient for the lagged dependent variable at this point in time cancel each other out.
a. Effect of Citation Rate

b. Effect of Preference Shifts

FIGURE 2  Impulse Response Functions. a. Effect of Citation Rate, b. Effect of Preference Shifts, c. Effect of Agenda Shifts, d. Effect of Dissensus.

*Note.* Plotted on the $y$-axes is the percentage of growth in the number of amicus curiae briefs that result from a one-standard deviation increase (a one-term impulse) in the independent variable at time $t = 1$. *(Continued on next page)*
c. Effect of *Agenda Shifts*

![Figure 2 (Continued)](image)

**FIGURE 2** (Continued)

d. Effect of *Dissensus*
DOES THE SUPPLY OF BRIEFS AFFECT INDICATORS OF THE COURT’S DEMAND FOR INFORMATION?

Thus far, we have treated the supply of information, as manifested by the filing of amicus curiae briefs, as the dependent variable to be explained by longitudinal variation in various indicators of the Court’s demand for information. We will now turn to considering whether it is reasonable to treat the indicators of the Court’s demand for information as exogenous to the supply of amicus briefs. Or does the supply of amicus briefs affect either the degree to which the Court signals a need for interest-provided information or the indicators of the Court’s latent demand for information?

We begin by pointing out that it is not theoretically plausible for Preference Shifts, Agenda Shifts, or Membership Change to be caused by Amicus Brief Growth. There is no causal mechanism that would imply that changes in the growth rate for amicus briefs of all ideological stripes would cause the median justice to move in either a liberal or conservative direction. The location of the median justice will largely be a function of new appointments to the Court, which are not connected in any way to amicus curiae brief filings. While amicus curiae briefs filed at the certiorari stage of the Court’s decision process may have an influence on which specific cases the Supreme Court hears (see Caldeira and Wright 1988), the annual growth in the number of briefs filed on the merits of cases should not predict the extent to which the Court’s agenda is shifting in some manner.

It is theoretically reasonable, though, to question the exogeneity of Citation Rate and Dissensus. It could be the case, for example, that increases in the supply of information to the Court would cause the justices to decrease the rate at which they signal their need for information through explicitly referencing amicus briefs in their majority opinions. It is also possible that increases in amicus curiae filings might polarize or exacerbate any internal divisions on the Court, thus increasing the level of dissensus. There is evidence of this type of dissensus-inducing effect at the case level (Collins 2008b).

To assess whether the supply of information as provided by amicus curiae briefs affects either Citation Rate or Dissensus, we first estimate a pair of OLS models. In one, Citation Rate is the dependent variable, and in the other Dissensus is the dependent variable. In both models, Amicus Brief Growth is included as an explanatory variable (at both time t and t-1). The results of these estimations are presented in Table 2a. None of the coefficient estimates are statistically significant, suggesting that Amicus Brief Growth does not have a contemporaneous or lagged effect on either Citation Rates or Dissensus.

As a further test of the exogeneity of Citation Rate and Dissensus, we estimate a vector autoregression (VAR) model and test whether Amicus Brief Growth “Granger causes” either Citation Rate or Dissensus. The VAR model allows for the estimation of the dynamic relationships between multiple time series. This model explicitly allows the multiple series to be considered endogenous, and tests of Granger causality provide information about exogeneity and causal relationships. These tests leverage the temporal ordering of variation in the potentially endogenous variables to determine whether changes in one variable lead to subsequent changes in (i.e.,

34See Granger (1969).
TABLE 2  
Testing Whether Supply of Briefs Decreases Citation Rates or Increases Dissensus

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Citation Rates</th>
<th>Dissensus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amicus Brief Growth</td>
<td>(-.002 (.003))</td>
<td>(-.005 (.003))</td>
</tr>
<tr>
<td>Amicus Brief Growth,(_{-1})</td>
<td>(.000 (.003))</td>
<td>(-.001 (.003))</td>
</tr>
<tr>
<td>N</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>F (2, 58)</td>
<td>0.63</td>
<td>1.25</td>
</tr>
<tr>
<td>R(^2)</td>
<td>.021</td>
<td>.041</td>
</tr>
</tbody>
</table>

b. VAR-Based Granger Causality Tests of the Effect of Amicus Brief Growth

<table>
<thead>
<tr>
<th>Granger Cause?</th>
<th>Amicus Brief Growth (\rightarrow) Citation Rate</th>
<th>No ((p = .493))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amicus Brief Growth (\rightarrow) Dissensus</td>
<td>No ((p = .248))</td>
</tr>
<tr>
<td>N</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The \(p\)-values presented are from Granger causality tests associated with a VAR(1) model including Amicus Brief Growth, Citation Rate, and Dissensus as endogenous variables. 
Note: * \(p \leq .05\) (one-tailed test). Entries are OLS estimates (and Newey-West standard errors).

Granger causes) another variable. We estimate a VAR(1) model, meaning that there is a single lag of each variable included as explanatory variables in each of the three models.\(^{35}\)

The results of the Granger causality tests are listed in Table 2b. These results indicate that Amicus Brief Growth does not Granger cause Citation Rate or Dissensus. Again, it appears that Citation Rate and Dissensus can be considered exogenous to Amicus Brief Growth, which supports the specification of our model of the annual growth of amicus briefs. Substantively, this result further supports our demand-driven theory of the supply of amicus curiae briefs at the Court.

It is also worth noting that the result for Dissensus stands in contrast with Collins’ (2008b) conclusion that the amount of amicus activity in a given Supreme Court case influences the probability of justices writing or joining separate opinions. While at a different level of analysis, our approach arguably provides a somewhat cleaner test of the causal link between organized interest activity and dissensus because we leverage the temporal sequencing of variation in these two variables. It is possible that Collins’ result is due to interests filing briefs in controversial cases in which dissensus on the Court is more prevalent.

CONCLUSION

In an effort to develop a better understanding of the over-time contours of organized interest advocacy at the U.S. Supreme Court, we seek to explain annual variation in the extent to which interests lobby the Court by filing amicus curiae briefs. Adopting a loosely market-based view of information at the Supreme Court, we argue that both the Court’s expressed and latent demand for

\(^{35}\)A likelihood ratio test reveals that the single lag specification is most appropriate here.
information on the availability and implications of legal policy alternatives will affect the supply of information provided to the Court by organized interests. A longitudinal analysis of the annual growth in amicus curiae filings at the Court supports all but one of our specific hypotheses. The rate at which the Court cites amicus briefs and shifts in either the Court’s ideological location or agenda space allocations exert a positive effect on the growth of amicus filings. There is also evidence that dissensus at the Court may increase the flow of amicus briefs. We further show that the supply of amicus curiae briefs does not, in turn, affect the Court’s expressed or latent demand for information.

These results have substantial implications for our understanding of the modern institutional history of the Supreme Court. The majority of the independent variables found to influence the level of organized interest activity are largely determined by the Court itself. The justices (and their law clerks; see Ward and Weiden 2006) are responsible for referencing amicus briefs in their opinions, have a great deal of influence over changes to the Court’s agenda, and determine the level of dissensus. The only predictor of amicus filings that is relatively exogenous to the Court is change to the ideological position of the median justice, which is determined primarily by new appointments to the Court. It therefore appears that the Court has, in a sense, caused much of the increase in organized interest activity that it has witnessed. This result stands in contrast with McGuire’s (2004) approach to the institutionalization of the Court that emphasizes the importance of external forces on institutional development.

In general, organized interests appear to be more responsive to changes at the Court than the Court is to changes in the level organized interest involvement. Recent interest group research asks whether group activity follows or leads governmental action (Lowery et al. 2004). Our results suggest that, at least at the U.S. Supreme Court, interests follow more than they lead. The characteristics of a policy venue drive organized interest activity while this interest activity leaves less of a mark on the venue.

On a related note, our analysis has interesting implications for our understanding of the dynamics of the lobbying behavior of organized interests. We provide a unique examination of aggregate lobbying activity at a policy venue over a long swath of time. Our results suggest that organized interests respond to the demand for information when making decisions about supplying such information. To the extent that it is preferable that policy makers have more information than less when making policy choices, it is encouraging to see that organized interests appear to gauge their need for information when choosing whether to lobby.

Though our results reveal a good deal about the dynamics of the overall levels of “lobbying” activity at the Court, one of the limitations of our study is that it cannot speak to potentially interesting variation in the advocacy activities of subpopulations of organized interests. Future research could, for instance, seek to assess whether conservative (liberal) interests respond to the citation-based signals of demand for information sent by conservative (liberal) justices.

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REFERENCES


