

Ideological Bias in Legislator Contact? Evidence From Witness Slips in the Illinois General Assembly

Michael Kistner and Michael Pomirchy*

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Abstract

Prior work suggests that representational gaps may arise due to biases in who contacts politicians. However, direct measures of legislator contact by members of the public are elusive. This paper leverages a unique data source: witness slips in the Illinois General Assembly, online forms individuals can use to support or oppose legislation before a committee hearing. Using these expressed positions, we place witnesses on the same ideological scale as legislators. We find that witnesses are located closer to the median Republican state legislator (both in Illinois and the nation as a whole) than the median Democrat; furthermore, conservative witnesses are disproportionately active in filing slips. Additional analyses demonstrate that legislators are more likely to vote for (against) a bill or amendment when witnesses support (oppose) the measure, particularly when slips come from donors or constituents.

*Michael Kistner (mkistner@uh.edu) is an Assistant Professor in the Department of Political Science at the University of Houston. Michael Pomirchy (mpomirchy@gmail.com) is a Postdoctoral Research Associate at Yale University's Institution for Social and Policy Studies (ISPS). We thank Yuki Atsusaka, Jesse Crosson, Alex Furnas, Alan Gerber, Shiro Kuriwaki, Leah Rosenstiel, and Boris Shor for helpful comments.

Responsiveness by legislators to constituency preferences requires knowledge of those preferences. However, recent research calls into question whether representatives accurately perceive their constituency’s views, typically finding a right-leaning bias in perceptions (Broockman and Skovron 2018; Furnas and LaPira 2023; Hertel-Fernandez, Mildemberger and Stokes 2019; Kertzer and Kafura 2023; Pilet et al. 2023).

An oft-cited reason for these misperceptions is differential exposure in public interactions and outreach (e.g., Miler 2010); as Broockman and Skovron put it, “the citizens who legislators and candidates meet are clearly not a representative sample: politicians may more frequently come in contact with constituents who seek out contact with them” (2018, p. 557). Arnold (1990) emphasizes the influence of these individuals on political decision-making, referring to them collectively as the *attentive public*.

If constituent interactions shape the beliefs and actions of political elites, it is important to understand which citizens are engaged and what policies they support. There is surprisingly little evidence speaking to these questions, due in part to the lack of direct data on contact with elected officials. Instead, scholars often examine indirect sources, like mass surveys that ask respondents whether they have contacted their representative (Broockman and Skovron 2018; Pilet et al. 2023; Schlozman, Verba and Brady 2012) or surveys asking elites which organizations they interact with (Hertel-Fernandez, Mildemberger and Stokes 2019; Pereira 2021). Beyond the fact that self-reported survey responses may be susceptible to non-response bias, social desirability bias, and other forms of measurement error, these measures rarely identify specific policies or bills individuals support or oppose. As a result, it is difficult to attribute differences in legislative action to differential contact.

While researchers do not typically have access to the phone calls, letters, and emails via which citizens contact legislators, this letter uses a unique data source: over 2,000,000 “witness slips” filed across over 20,000 distinct bills and amendments in the Illinois General Assembly over a ten-year period. Witness slips are online forms that any individual

can complete to testify in support or opposition to a bill (or amendment) being heard in committee. On the Illinois General Assembly website, when a committee hearing is posted, individuals can select a bill being considered by the committee, create a witness slip, and publicly express their position on the bill, as well as report any interest group affiliations. To our knowledge, Illinois is the only legislature (state or otherwise) with such data accessible.

These data provide a rare opportunity to examine direct contact between citizens and elected officials. Several advantages are worth highlighting. First, these witness slips help us characterize the voice of the attentive public across a wide range of issues, while most prior public opinion work examines only those policies that were the subject of survey questions (e.g., [Lax, Phillips and Zelizer 2019](#); [Warshaw and Rodden 2012](#)). Second, because citizens take positions on the same bills lawmakers vote on, witnesses and legislators can be scaled on the same ideological dimension ([Achen 1978](#); [Matsusaka 2001](#)). Third, slips allow us to measure political *behavior* in this context, not just policy *preferences*. Finally, while prior work has analyzed data on interest group contact before (e.g., [Butler and Miller 2022](#); [Crosson, Furnas and Lorenz 2020](#); [Thieme 2021](#)), these new data allow us to also explore *mass* political participation and how it influences legislative decision-making. Because slips include information on the interest group affiliation of each witness, we can analyze witnesses affiliated with interest groups separately from those without any affiliation.¹

After matching witness slips to committee votes and using ideal point scaling to estimate the ideology of witnesses alongside legislators, we find that a majority of witnesses are located closer to the median Republican state legislator (both in Illinois and the U.S. as a whole) than the median Democratic legislator. Furthermore, conservative witnesses file more slips

¹This dichotomy mirrors the description of attentive publics by Arnold. As he writes, “When important interests are at stake, [organized interests] communicate with their members in an attempt to create and mobilize larger attentive publics. Attentive publics can also arise when there are no organized groups at all...publicity, whether a natural product of the media covering the news or generated by some of the participants in policy making, can produce attentive publics even among the unorganized and unorganizable” (1990, p. 66).

than liberal ones, skewing the ideological distribution of witnesses further right when taking into account the volume of legislator contact.

In additional analyses, we examine whether legislators are responsive to these witness slips, comparing how legislators vote when witnesses take positions on bills versus when they do not. In particular, we find that legislators are responsive to members of groups that donate to the legislator as well as constituents. These results suggest that ideological biases in legislator contact can be politically meaningful.

1 Measuring Witness Ideology

In the Illinois General Assembly, when a bill is heard by committee, individuals are given the opportunity to file “witness slips” in favor of or in opposition to the bill or specific amendments. Witness slips (post-2012) are online forms accessible through the my.ilga.gov website. Once a committee hearing is posted, individuals can access the website, click on a link to a specific committee hearing, select a bill/amendment, and create a witness slip. On the slip itself, individuals input their biographical information (including interest group affiliation) and state their position (support or oppose).² All individuals’ names, along with their positions, are published online.

These witness slips have, in part, become a tool used by interest groups seeking to persuade legislators. As an example, 3,273 witness slips were filed on HB 1438, the 2019 bill that legalized recreational marijuana in Illinois. Interest groups represented in the supporting column include the ACLU of Illinois, the SEIU, and the Juvenile Justice Initiative. Interest groups on the opposing side include the IL Drug Enforcement Officers Association, the IL Sheriffs Association, and members of various police departments. This group mobilization is intentional; some groups, like the ACLU, send mailers to their members to flag particular

²While witnesses are allowed to file a witness slip without taking a position, this is quite rare. In our data, only 0.85% of slips do not take a position.

pieces of legislation, for the purposes of communicating the extent of mass agreement with the group’s position to legislators. While some bills accrue thousands of witness slips because interest groups actively mobilize support, approximately half (52.3%) of witness slips filed do not report any interest group affiliation.

1.1 Data and Methods

To characterize the ideological views expressed via this form of contact, we collect all witness slips filed between 2013 and 2022, consisting of 2,225,267 witness slips on 23,953 distinct bills and amendments. Appendix A presents key descriptive statistics on these witness slips, including the number of slips filed per legislative session, the percent of bills and amendments with witness slips filed, and the percent of slips filed in support versus opposition.

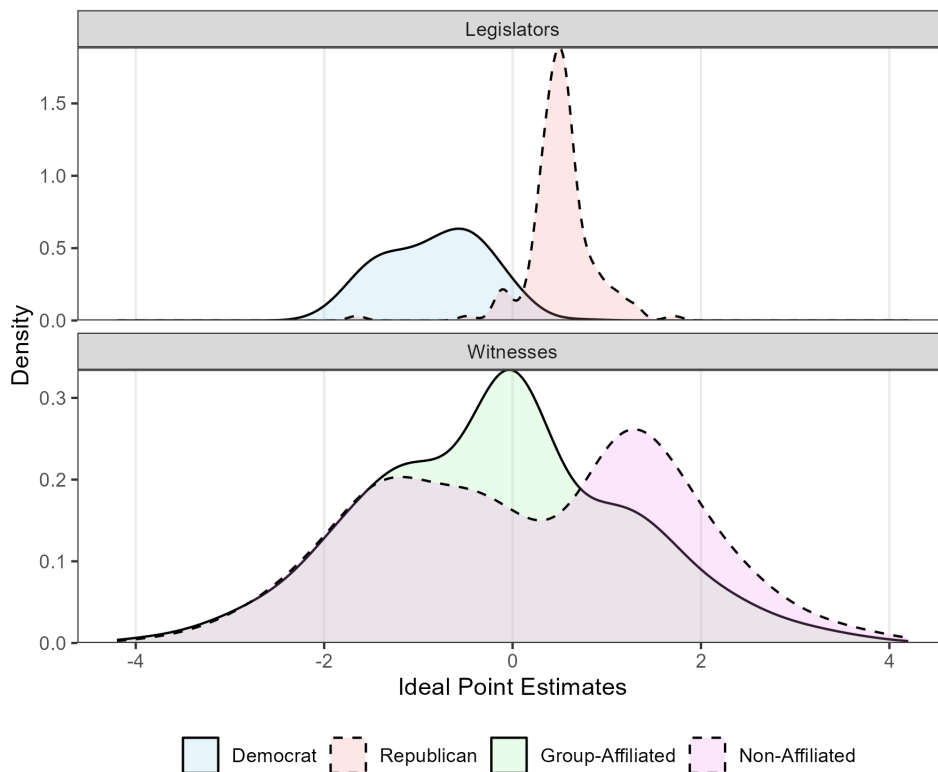
Our procedure for estimating ideology takes advantage of the fact that witness slips identify the exact bill or amendment the witness supports or opposes, the same measures which are then voted on by legislators. By observing *positions* (slips and votes) by both types of *actors* (witnesses and legislators), it is possible to map witnesses and legislators onto the same ideological space.

After converting these position data to a vote matrix, we estimate a unidimensional Bayesian item response theory (IRT) model (Clinton, Jackman and Rivers 2004). To make our estimates comparable to existing work, we anchor the ideal points for state legislators at their Shor and McCarty (2011; 2022) ideology score using a spike prior. To estimate ideal points for witnesses in this ideological space, we scale all witnesses that file slips on five or more distinct measures. This threshold is purposefully a low one, chosen to include as many witnesses as possible while still recovering meaningful ideal points. Appendix B describes our ideal-point scaling procedure in more detail and explores result sensitivity to using a higher slip threshold. In addition, in our main analysis we take advantage of random sampling from the posterior distribution to account for uncertainty in our ideal

point estimation. In Appendix C, we validate our estimated ideal points by aggregating to the group level, showing that witnesses affiliated with known conservative organizations (e.g., the National Rifle Association) tend to be conservative, while witnesses affiliated with known liberal organizations (e.g., the American Civil Liberties Union) tend to be liberal.

1.2 Results

Figure 1: Estimated Ideological Distributions for Legislators and Witnesses



Note: Figure shows the density curve of ideal points for legislators (both Republicans and Democrats) and witnesses (both group- and non-affiliated). Legislator ideal points are fixed at Shor-McCarty ideology scores, while witnesses are scaled in the same unidimensional space.

The distribution of ideal points is shown in Figure 1. The top panel displays the ideal points of legislators, for comparison, while the panel below shows the ideological distribution for all scaled witnesses. We separate witnesses who report an affiliation with an interest

group on any of their slips (*group-affiliated*) and those who do not (*non-affiliated*).

There is a clear difference between group-affiliated and non-affiliated witnesses. The former are fairly moderate, with a mode located between the two party medians. Despite this centrism, there is a slight rightward skew. A majority (58.9%) of group-affiliated witnesses are located closer to the median Illinois Republican legislator than the median Democrat.³

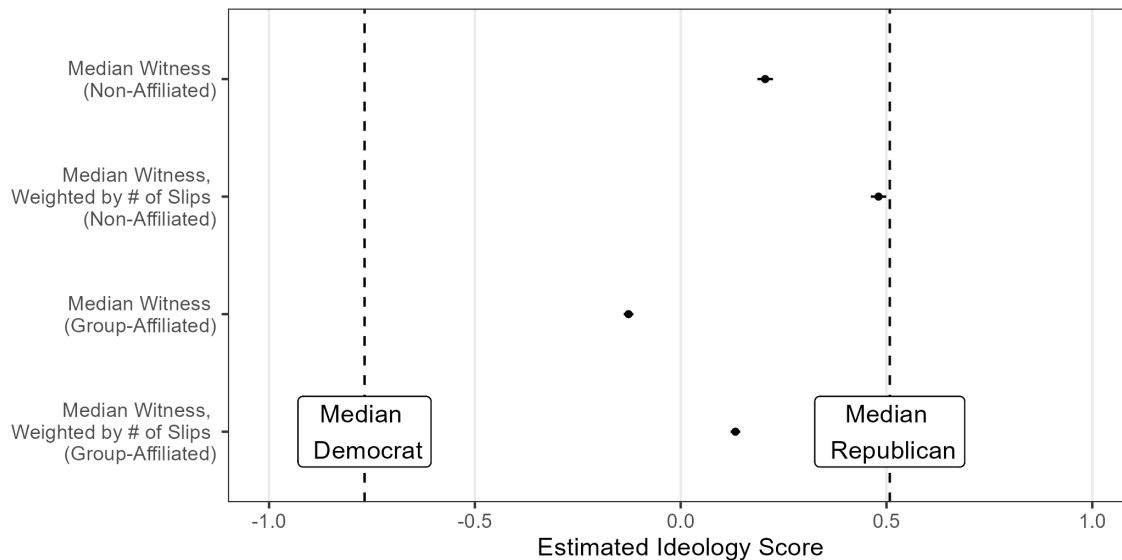
Non-affiliated witnesses are both more right-leaning and more polarized. Nearly two-thirds (63.2%) of these witnesses are located closer to the median Republican Illinois legislator than the median Illinois Democrat.⁴ Furthermore, over half (53.6%) of non-affiliated witnesses are estimated to be more conservative than the median Illinois Republican legislator and nearly one in three (32.7%) are more conservative than the most conservative Illinois Republican. For comparison, one in four (24.4%) are more liberal than the median Illinois Democrat, and 8.9% are more liberal than the most liberal Illinois Democrat.

When considering the volume of contact, the ideological distributions skew further right. Figure 2 displays, for group- and non-affiliated witnesses separately, the ideology of the median witness when weighted by number of slips filed versus unweighted. To account for uncertainty in the ideal point estimation procedure, we take 1,000 independent random draws from the posterior distribution of witness ideal points, then plot the median over the 1,000 draws as well as the 95% credibility interval. As the figure shows, because conservative witnesses file more slips, the ideology of the median slip author is more conservative than the median witness writ large, for both group-affiliated and non-affiliated witnesses. For the latter, the “median slip” comes from a witness whose ideology is nearly indistinguishable from the median Illinois Republican. Together with Figure 1, this suggests that the voices legislators hear when contacted tend to speak with a conservative accent.

³Because our estimates are anchored to the Shor-McCarty scores, we can also compare witnesses in Illinois to state legislators nation-wide during this time period; when comparing to state legislators nationwide, 56.4% of group-affiliated witnesses are closer to the median Republican than the median Democrat.

⁴Again comparing to state legislators nationwide, 62.1% of non-affiliated witnesses are closer to the median Republican than the median Democrat.

Figure 2: Median Witness Ideology, Weighted by Number of Slips Filed Versus Unweighted



Note: Figure shows the ideal point of the median witness (unweighted and weighted by number of slips filed) for both group- and non-affiliated witnesses relative to the median Democratic and Republican Illinois legislators, calculated from 1,000 independent random draws from the estimated posterior distribution of ideal points. Solid horizontal lines display 95% credibility intervals.

2 Legislator Responsiveness to Witness Slips

2.1 Data and Methods

Are legislators responsive to witness slips? To address this question, we take advantage of variation in the number of witness slips filed by members of interest groups across bills and amendments. If witness slip mobilization affects legislative roll-call voting, then legislators should be more likely to vote in favor of a measure when members of interest groups file more favorable slips (and the converse should be true when group members file slips opposing a measure). While this analysis focuses on the impact of slips from group-affiliated witnesses, in Appendix D, we conduct a similar analysis examining responsiveness to constituents versus non-constituents on education-related bills, where witnesses often describe the school or school district they are associated with. Our analysis of these bills shows that only slips

from constituents have an impact on voting.

Our unique data set of witness slips is a prime setting to gauge whether donor groups achieve better representation on roll-call votes by contributing to legislators. There is a large literature on interest groups in U.S. politics examining the question of whether campaign contributions lead to policy influence (e.g., [Ansolabehere, de Figueiredo and Snyder 2003](#); [Austen-Smith and Wright 1994](#); [Stratmann 2005](#)). Taken altogether, the empirical evidence in prior work has been mixed (for a summary, see [Powell 2013](#)). On the other hand, separate work argues that mass member mobilization for or against policy is a key source of political influence for groups ([Bombardini and Trebbi 2011](#); [Kollman 1998](#)). Our data allow us to estimate the effect of interest group mobilization side-by-side with campaign contributions, as we have a measure of interest group positions on bills across a wide range of issues.

For this analysis we structure the data at the legislator-group-vote level. For legislator i , interest group j , and vote k , the dependent variable is a binary indicator for whether the legislator voted for the measure. The key independent variable, *Net Number of Witness Slips*, represents the volume of witness slip support or opposition by witnesses reporting affiliation with the interest group:⁵

$$\begin{aligned} \text{Net Number of Witness Slips}_{jk} = & \# \text{of slips filed by members of group } j \text{ in support of vote } k \\ & - \# \text{of slips filed by members of group } j \text{ in opposition to vote } k. \end{aligned}$$

This variable is then standardized (i.e., we subtract the mean and divide by the standard deviation) to facilitate interpretation. We then estimate the following:

$$\text{Vote}_{ik} = \beta \text{ Net Number of Witness Slips}_{jk} + \alpha_i + \gamma_j + \delta_t + \epsilon_{ijk},$$

⁵While this net measure takes into account any disagreement by witnesses affiliated with the same group, there is typically widespread agreement on specific issues. For all group-vote pairs, the average level of within-group agreement by witnesses was 98.9%.

where Vote_{ik} is a binary indicator equalling 1 if legislator i votes in favor of measure k , and 0 otherwise. Here α_i , γ_j , and δ_t represent legislator, interest group, and legislative session fixed effects. We also estimate this equation using triadic legislator-group-session fixed effects instead of separate fixed effects, to control for all shared characteristics between group and legislator at a particular time. To evaluate whether slip responsiveness varies by the contribution behavior of the group, we run additional specifications that include the amount donated by group k to legislator i , both as a separate variable as well as interacted with the witness slips variable. We also control for the ideological agreement between the group and the legislator.

Contribution data come from the National Institute of Money in State Politics and include the dollar amount of all campaign contributions made by the group to the particular legislator. Ideology is measured using CFscores (Bonica 2014), campaign finance-based measures of the ideology of groups and legislators on a common scale. Campaign contributions are measured on the log scale (by adding 1 and taking the logged dollar amount of total contributions), and ideological distance is simply the absolute difference between the CFscore of the interest group and the CFscore of the legislator.

2.2 Results

The results of this analysis are shown in Table 1. The first column presents the results from the specification described above, including solely the legislator, group, and session fixed effects for all groups matched to the campaign finance datasets. The Net Number of Witness Slips variable has a positive effect on Legislator Vote. A one standard deviation increase in the Net Number of Slips (approximately 50 slips) is estimated to increase the probability the legislator votes in favor of a measure by almost six percentage points. Column 2 reveals this estimate is robust to the inclusion of combined legislator-group-session FEs.

Columns 3 and 4 demonstrate that this responsiveness is conditional. As revealed by

Table 1: Witness Mobilization and Committee Roll Call Votes

	DV: Legislator Vote (1 = Favor, 0 = Oppose)			
	(1)	(2)	(3)	(4)
Net # Slips	0.0588** (0.0168)	0.0622** (0.0170)	0.1037* (0.0405)	0.1057** (0.0391)
Net # Slips x Log Contributions			0.0158* (0.0079)	0.0144+ (0.0076)
Net # Slips x Ideological Distance			-0.1485** (0.0535)	-0.1389** (0.0495)
Log Contributions			0.0003+ (0.0002)	
Ideological Distance			0.0014 (0.0009)	
Num.Obs.	968,832	968,832	968,832	968,832
Legislator FEs	Y	N	Y	N
Group FEs	Y	N	Y	N
Session FEs	Y	N	Y	N
Legislator-Group-Session FEs	N	Y	N	Y

Standard errors clustered by bill shown in parentheses below coefficients from OLS
⁺p<0.10; *p<0.05; **p<0.01

the positive coefficient on Witness Slip-Log Contribution interaction, legislators are more responsive to slips filed by interest groups that donate to them, controlling for ideological distance. A one-SD increase in supportive witness slips filed by group members leads to an additional 15.8% probability that the legislator votes in favor, for every \$1,000 contributed by the group to the legislator. The negative coefficient on the Witness Slip-Ideological Distance interaction reveals that responsiveness to slips weakens when groups and legislators have divergent policy preferences.

In Appendix E, we use our data to evaluate whether the ideological diversity of the groups filing slips is associated with bill success, as Lorenz (2020) suggests is the case in the U.S. Congress. Testing this proposition using the witness slips produces a similar finding: more ideologically diverse coalitions garner greater support from legislators on committee votes.

3 Conclusion

This paper provides a rare glimpse at contact between individuals and elected officials using data on witness slips in the Illinois General Assembly. These data allow us to characterize the ideology of the attentive public across a variety of issues, providing insight on which voices legislators hear as they draft, refine, and vote on public policy. Describing such contact and preferences on a bill-by-bill basis, which, to our knowledge, has never been possible before, enables us to rigorously answer questions about the nature and influence of legislator contact.

After scaling witnesses on the same ideological space as legislators, we find that the majority of witnesses are ideologically closer to Republicans (both in Illinois as well as nationwide) than Democrats. This is especially true for witnesses without any group affiliation, and for the witnesses who file the most slips. Additionally, we find evidence these witnesses are influential. Legislators are more likely to vote for (against) a bill or amendment when witnesses support (oppose) the measure, particularly when the witness represents a group that donate to the legislator or when they come from the district the legislator represents.

How generalizable are our results? On the one hand, we draw conclusions based on a wide variety of different issue areas across 10 years of witness slips, encompassing many more policies than prior work based on ballot initiatives, referenda, or survey questions. On the other hand, because witness slips are exclusively used in the Illinois General Assembly, our conclusions come from one legislature that differs from others in dimensions such as partisanship, competitiveness, and professionalization. Future work that finds similar opportunities to quantify legislator contact would help us understand how ideological bias and the influence of legislator contact varies across different contexts.

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Online Appendices

Ideological Bias in Legislator Contact? Evidence from Witness Slips in the Illinois General Assembly

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A Descriptive Statistics on Witness Slips

Figure A1 presents trends in the number of witness slips (in 100,000's) filed over time. This figure shows that there are hundreds of thousands of witness slips filed in every legislative session, starting at around 230,000 witness slips in the 2013-2014 session and increasing to more than 630,000 slips in the 2021-2022 legislative session.

Figure A1: Number of Witness Slips Filed Over Time

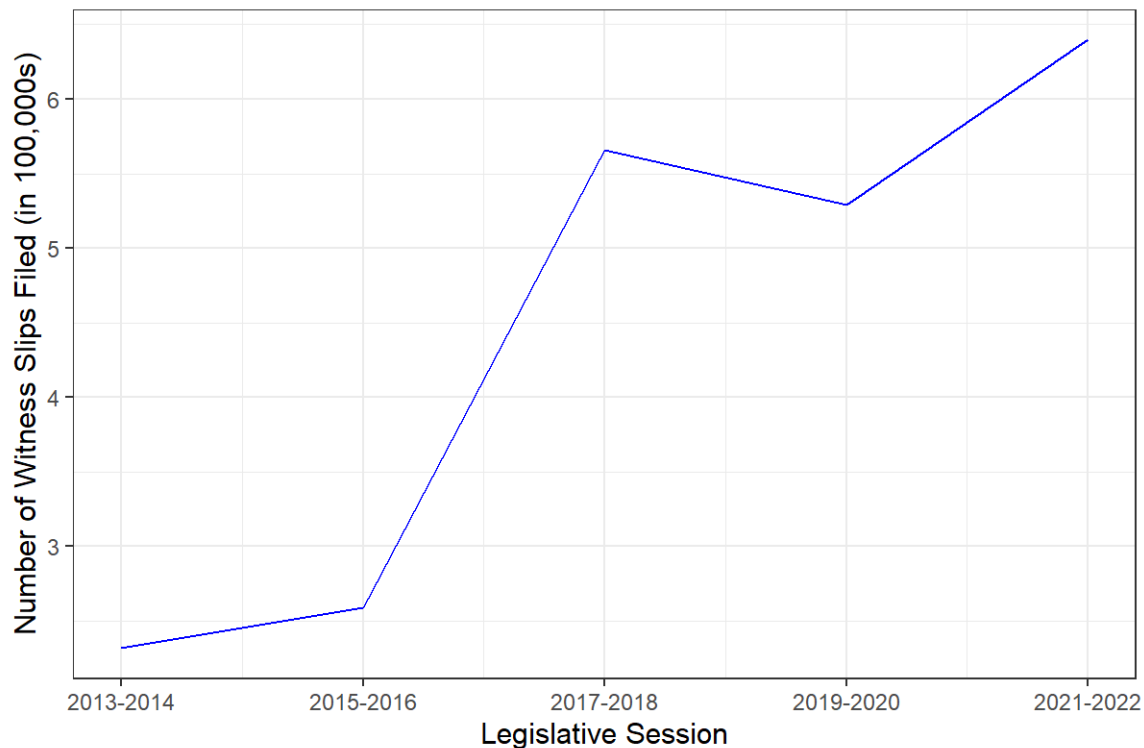
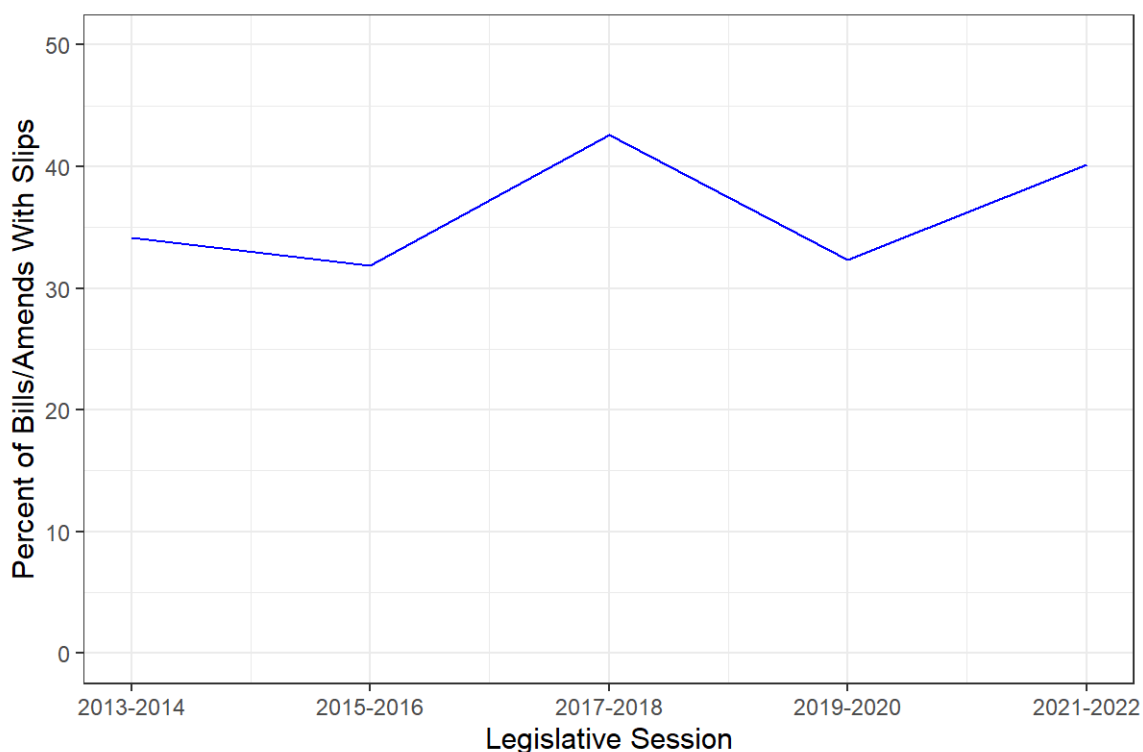


Figure A2 presents the percent of bills/amendments in each legislative session with witness slips. The percentage is roughly the same over time; between 30 and 40 percent of all bills/amendments filed carry some activity via witness slips.⁶ This suggests a surprisingly high level of public attention on activities in the Illinois state legislature. Moreover, this also implies that this public attention is not restricted to a handful of bills; rather, there exist

⁶The total number of bills/amendments is around 13,000-14,000 per session. The raw number of bills/amendments with witness slips is approximately 4,000-5,000.

observers for even potentially obscure legislation.

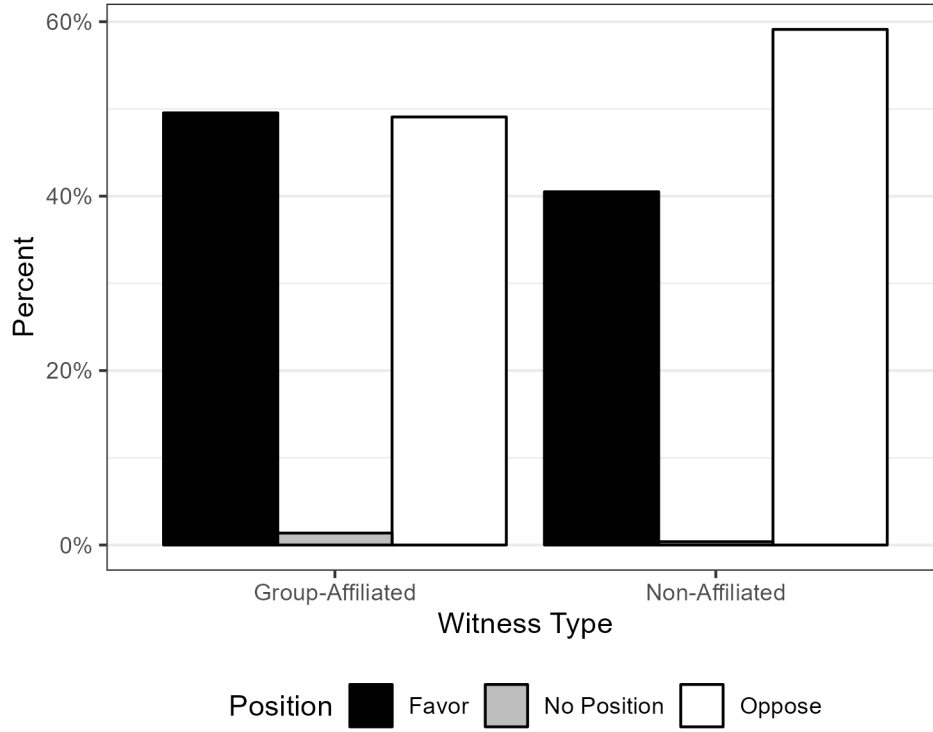
Figure A2: Percent of Bills/Amendments with Witness Slips Over Time



Finally, Figure A3 displays the percent of witness slips filed that support, oppose, or take no position on the measure in question, separating group-affiliated and non-affiliated witnesses to mirror the discussion in the text. As in other analyses, we observe differences between the two types of witnesses. Witnesses reporting a group affiliation are approximately equally as likely to support or oppose a measure when they file a slip. In contrast, non-affiliated witnesses are much more likely (59.1% versus 40.5%) to file a slip in opposition to a measure versus one in support. One explanation is that, as shown in the main text, slips from non-affiliated witnesses are much more likely to come from conservative witnesses. Given Democrats in Illinois control the chambers and committees, these conservative witnesses may be spending most of their time opposing legislation the majority party is proposing. Neither type of witness files many slips taking no position (1.3% of group-affiliated witness

slips versus 0.3% for non-affiliated witnesses).

Figure A3: Positions Taken on Slips by Witness Type



B Description of Ideal Point Scaling Methodology

As discussed in the main text, we scale witness ideology in the same ideological space as legislators using the Bayesian IRT model proposed by [Clinton, Jackman and Rivers \(2004\)](#) and implemented using the *pscl* package in R. We begin by assembling a vote matrix where each row represents a distinct vote on a bill or amendment, each column represents a legislator or witness, and each cell records the position taken (Yes or No) on the vote in question. If the legislator did not participate in the vote or the witness did not take a position on the vote via slip, it is coded as missing. We use all votes taken in the Illinois General Assembly between 2013 and 2022 for scaling, including both committee and floor votes as well as House and Senate votes. We exclude all votes where legislators were unanimous either for or against the bill, as these votes do not allow for the ideological placement of witnesses relative to legislators. We also exclude witnesses that filed fewer than 5 slips on votes that meet this criteria, as the small number of observed votes makes such estimates imprecise. To identify unique witnesses, we treat all slips with the same first name, last name, and interest group affiliation as representing the same witness. In cases where there are slips with the same first and last name, but some slips do not possess an interest group affiliation while others do, we impute the observed interest group affiliation. If there are multiple interest group affiliations for a single first and last name combination, we treat these as separate witnesses. This procedure produces 12,799 unique witnesses with at least 5 slips on included votes that we scale.

This vote matrix is then used as the input to the `ideal()` command. We specify a uni-dimensional model. The approach differs from the typical application in two ways. First, because we are interested in scaling witnesses and groups relative to legislators along a conservative-liberal dimension, for all state legislators that served in the General Assembly before 2021 we use their [Shor-McCarty \(2011\)](#) ideal point as a spike prior, effectively

constraining their ideal point in our estimation to match their Shor-McCarty score. More specifically, the prior on the ideal point parameter for all legislators who serve prior to 2021 is a Normal prior with mean at their Shor-McCarty ideal point, and a precision of $1e12$. For all other legislators and all witnesses, the prior on the ideal point parameter is set to mean 0 and a precision of 0.3.

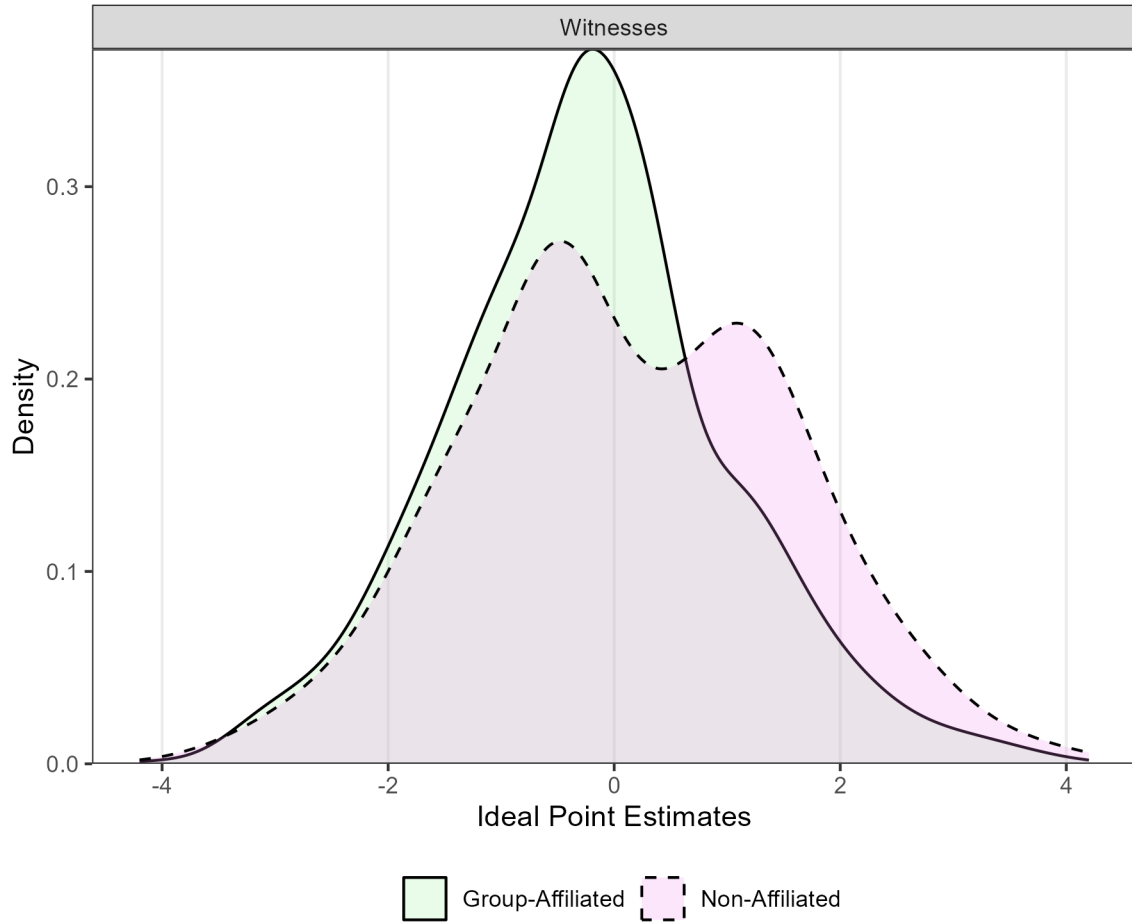
Second, as recommended by Jessee (2016), all item parameters (i.e., the cutpoints on particular votes) are estimated using only the legislators' positions and not the witnesses. The massive imbalance of witnesses relative to legislators on some votes (particularly committee votes) means that the former would wield disproportionate influence on the estimated cutpoints. Given our goal of placing witnesses in the legislators' ideal point space and not vice-versa, we use the legislators' ideal points to estimate the item parameters, and then use these item parameters to estimate witness ideal points.

This model is then fit via Markov Chain Monte Carlo sampling. We run the MCMC procedure for 3,000 samples, using 1,000 samples for the burn in period and thinning every 50 draws. Trace plots indicate satisfactory convergence of all parameters.

One potential concern with our scaling methodology is that the number of witness slips used to scale witnesses is in some cases quite low, given that we analyze witnesses with as few as 5 positions on included votes. While a higher threshold for the minimum number of slips could be used, this risks biasing our estimates of the ideology for the entire witness population because (as Figure 2 shows) witnesses that file more slips tend to be more conservative.

To address this concern, we replicate the witness portion of Figure 1 using a higher threshold, doubling the minimum number of positions to 10. The resulting distribution with the higher threshold is shown in Figure B1. As the new Figure shows, the main conclusions drawn in the text do not change when we use this higher threshold. The distribution of group-affiliated witness ideology is still unimodal and centrist, while the distribution of non-affiliated witness ideology is bimodal and polarized. As before, the majority of witnesses

Figure B1: Estimated Ideological Distributions for Witnesses, Minimum 10 or More Positions



are located closer to the median Republican legislator than the median Democrat. Of the non-affiliated witnesses, 60.5% are closer to the median Illinois Republican than the median Illinois Democrat, while 59.4% are closer to the median Republican state legislator nationwide than the median Democratic state legislator across the country. For the group-affiliated witnesses, the equivalent numbers are 55.0% and 52.6%, respectively.

C Exploration and Validation Using Interest Group Ideology

In this Appendix section, we examine the ideological distribution of interest groups as measured using the scaled ideology of witnesses reporting affiliation with the group. First, we calculate the average ideology of witnesses for each group, for each interest group with at least five affiliated, scaled witnesses.

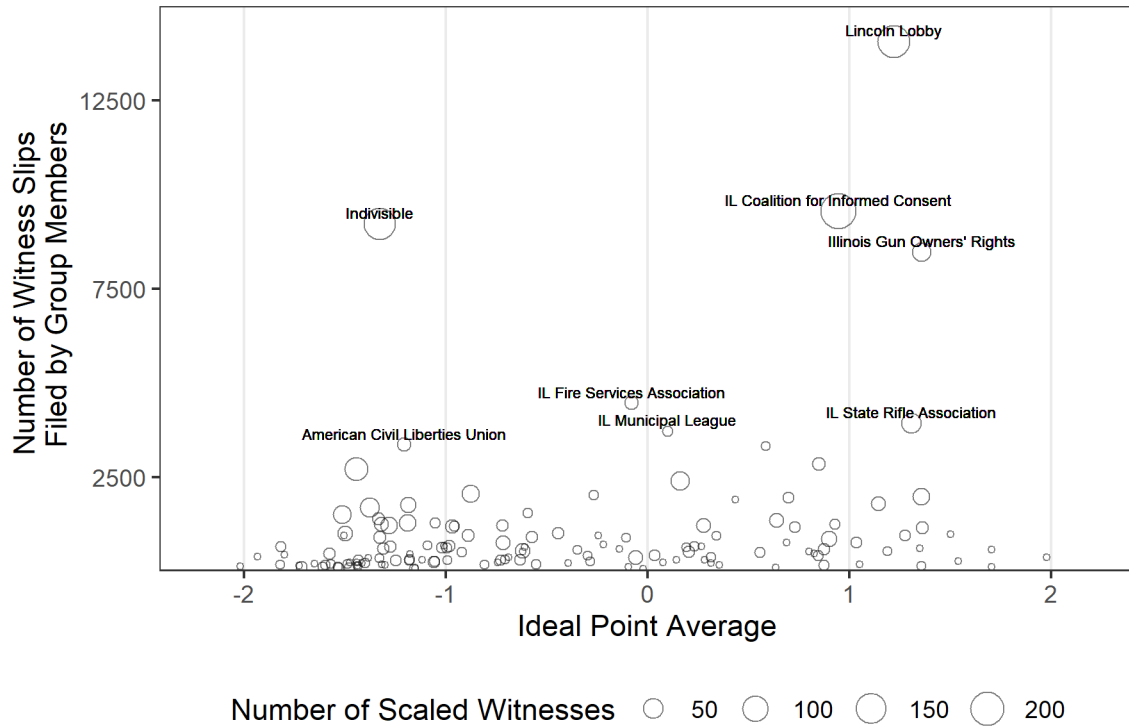
Figure C1 displays the estimated group ideology for all groups with at least five affiliated witnesses. Each group is indicated with a circle, with circle size scaled according to the number of witnesses affiliated with each group (which ranges from 5 to 228). The y-axis displays the total number of witness slips filed by members affiliated with the group, a variable that ranges from 65 to over 14,000.

The x -axis shows the average ideology of witnesses affiliated with the group, to illustrate the ideological distribution of interest groups. On the one hand, the interest group distribution is on average left-leaning. The median group ideal point is -0.66 , well to the left of the center. Of these groups, 60.8% are located closer to the median Illinois Democrat state legislator during this time period than the median Illinois Republican.

On the other hand, and mirroring our finding that conservative witnesses are more active, the interest groups that file the most slips tend to be right-leaning. Of the top 8 most active groups, two are left-leaning (the ACLU and Indivisible, a progressive activist group), two are centrist (the IL Municipal League and the IL Fire Services Association), and four are right-leaning (the IL State Rifle Association, IL Gun Owners' Rights, the Coalition for Informed Consent, an anti-vaccine group, and the Lincoln Lobby, an anti-tax and anti-regulation group).

Finally, Figure C2 displays how heterogeneous witness ideology is for witnesses affiliated with the same group. The figure shows, for all groups with 25 or more scaled witnesses, the

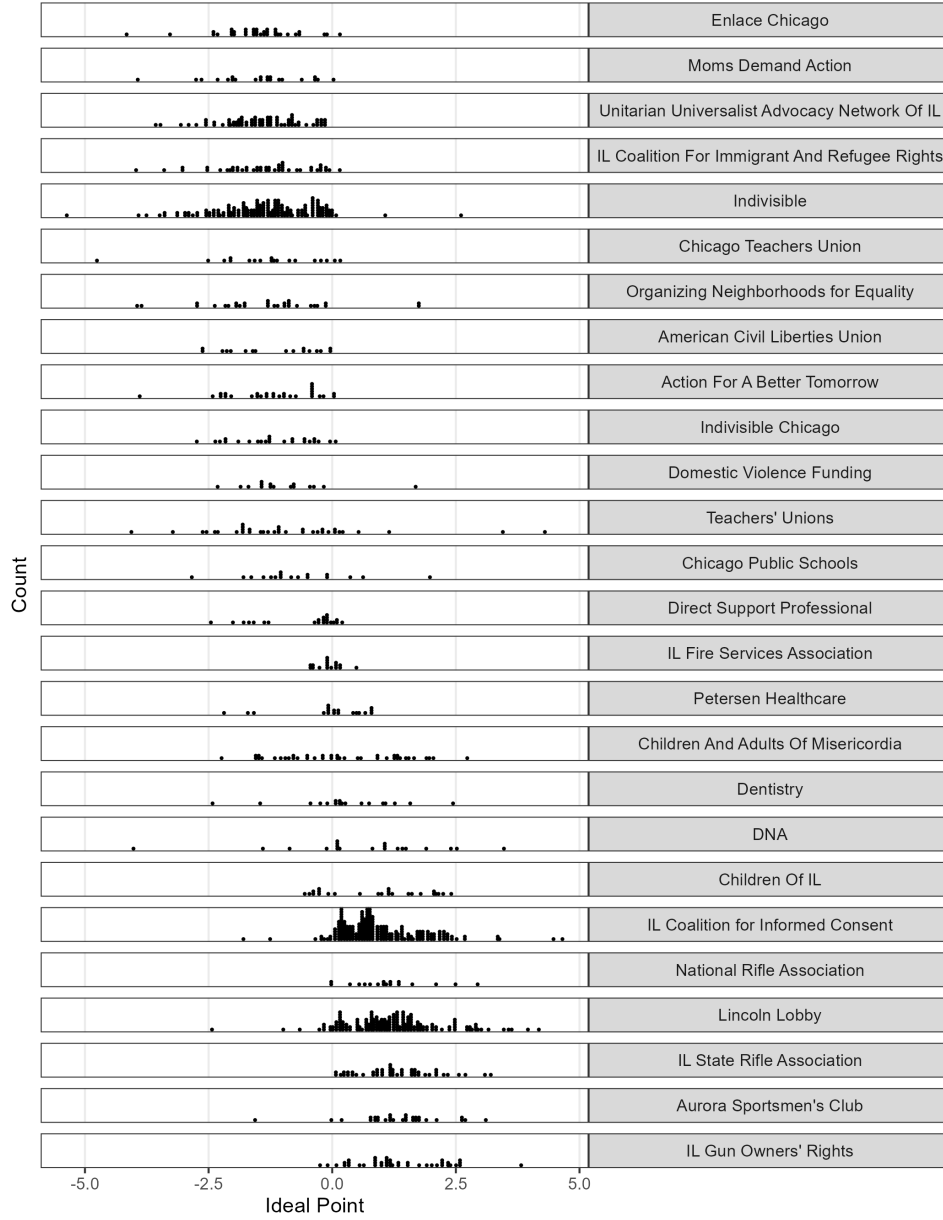
Figure C1: Witness Slip Involvement and Ideology, Interest Groups



Note: Figure displays the mean ideal point of all scaled witnesses affiliated with each group. The y-axis indicates the number of slips filed by affiliated witnesses, while size of circle indicates the number of scaled witnesses. Group names are displayed above circle for the most active groups.

ideology of each individual witness. As the figure shows, while there are clear differences in averages across groups, there is also considerable heterogeneity within groups.

Figure C2: Distribution of Witness Ideology Within Groups



Note: Figure displays the estimated ideal point of all witnesses affiliated with each group with 25 or more scaled witnesses. Each dot indicates the ideal point of 1 witness. As the figure shows, despite clear left-right tendencies for each group there is considerable heterogeneity in witness ideology within groups, suggesting witnesses have preferences connected to but not entirely dependent on group ideology.

D Evaluating Responsiveness to Constituency Opinion on Education Bills

Another avenue by which witness slips can affect legislative roll-call voting behavior is to communicate constituent preferences. While legislators may engage in heuristic processing by identifying (and potentially adopting) the positions of like-minded groups, legislators may also take cues from their constituents. In the main text, we largely focus on interest group affiliations because these are easily identifiable in the data, and they can be found in hundreds of thousands of witness slips. However, there are some cases, which we explore here, in which witnesses disclose constituency information, either in the “employer” or “interest group” fields.

In particular, on education-related bills, witnesses often note the school district or school they attend (or are otherwise affiliated with). As an example, HB3428, which passed both chambers in 2015, was a bill that required institutions of higher education to accept Advanced Placement (AP) exams as credit for coursework. Many of the witness slips filed on this bill (which can be found at this [link](#)) are from teachers, students, and parents. Bills like these give us a chance to assess whether legislators are responsive to constituency opinion. In particular, these education-related bills carry two important advantages. First, we can directly map schools and school districts to legislative districts. In particular, the Illinois State Board of Education conveniently provides a spreadsheet online detailing a deterministic mapping from school districts and schools to legislative districts. Second, these geographic identifiers are observable to the legislators reading the witness slips. As such, we have a greater expectation of finding evidence of responsiveness in this case.

For this analysis, we structure the data at the witness-legislator-vote level. The dependent variable is equal to 1 if the legislator votes “yes” on the bill, and 0 otherwise. Abstentions or no-votes are counted as missing. For each witness i on vote k , the key independent variable

is coded as follows:

$$\text{Support via Slips}_{ik} = \begin{cases} 1 & \text{filed slip in support} \\ -1 & \text{filed slip against} \\ 0 & \text{otherwise} \end{cases}$$

Note that duplicate slips filed by the same witness are dropped.⁷ The results are shown in Table D1. In the first two columns, which vary in how the fixed effects are specified, legislator roll-call voting on committee votes is regressed on witness slip support, using witnesses from all districts. We fail to detect an effect here. The next two columns show the same results, only including witness-legislator dyads where both the witness and legislator belong to the same district. Here, we find an effect, which is similar no matter how we specify the fixed effects. If a witness from the same district as the legislator switches from indifference to supporting the bill, this leads to a 6% increase, on average, in the probability the legislator supports the bill.

⁷These cases might be attributed to inadvertently submitting a slip twice for the same bill, a technological/clerical error, etc.

Table D1: Individual Witness Support and Committee Roll Call Votes

	DV: Legislator Vote (1 = Favor, 0 = Oppose)			
	All Dist.	All Dist.	Same Dist.	Same Dist.
Net # Slips	0.006 (0.004)	0.007 (0.004)	0.060* (0.030)	0.059+ (0.030)
Num.Obs.	29,066,117	29,066,117	161,852	161,852
Legislator FEs	Y	N	Y	N
Witness FEs	Y	N	Y	N
Session FEs	Y	N	Y	N
Legislator-Witness-Session FEs	N	Y	N	Y

Standard errors clustered by bill shown in parentheses below coefficients from OLS.

+p<0.10; *p<0.05; **p<0.01

E Evaluating the Impact of Diverse Coalitions on Committee Votes

In this section, we use our unique data set of witness slips to replicate and investigate prior findings regarding the determinants of bill advancement and legislative success. In particular, [Lorenz \(2020\)](#) uses a data set of interest group positions to show that bills backed by diverse lobbying coalitions are more likely to attract the support of rank-and-file members of Congress. More specifically, using 13,000 organizations’ positions on over 4,700 bills introduced in Congress between 2005 and 2014 (the 109th–113th Congresses), Lorenz demonstrates that “bills supported by coalitions with higher levels of interest diversity are more likely to receive committee consideration” (page 226). In the context of witness slips, we have an opportunity to carry out a similar test.

For this analysis, we structure the data at the committee vote level. Since the vast majority of bills pass through committee (over 90 percent), the dependent variable is the vote margin, i.e., the number of votes cast by legislators in support minus the number of votes cast in opposition (mean = 5.27, s.d. = 3.95). Unanimous committee votes are removed from the data. The key independent variables are the standard deviation of the CFscores of interest groups that support each bill (weighted by the number of slips filed by each group) and the weighted standard deviation of ideal points of interest groups that oppose each bill. Moreover, while the first three specifications simply regress the vote margin on ideological diversity of each side, we add additional controls in the last specification for the net number of interest groups that support the bill (Net # IG Supp.) and the number of legislators on the committee (Committee Size). We include session and chamber fixed effects in all specifications.

The results are presented in [Table E1](#). In column 1, we find that more diverse coalitions on the supportive side are associated with more legislators voting in favor of the bill. In

Table E1: Diverse Lobbying Coalitions and Committee Roll Call Votes

	DV: Committee Vote Margin			
	(1)	(2)	(3)	(4)
Ideol. Diversity (Supp. Side)	1.3149* (0.4448)		1.4957* (0.3935)	0.7038* (0.2183)
Ideol. Diversity (Opp. Side)		-1.8632+ (0.7204)	-2.0226+ (0.7379)	-2.9174** (0.4546)
Net # IG Supp.				0.0037** (0.0005)
Committee Size				0.3417** (0.0144)
Num.Obs.	4,173	4,173	4,173	4,173
Session FEs	Y	Y	Y	Y
Chamber FEs	Y	Y	Y	Y

⁺p<0.10; *p<0.05; **p<0.01

column 2, more diverse coalitions on the opposing side are associated with fewer legislators voting in favor the bill. Columns 3 and 4 show similar results for the ideological diversity variables when they are both included together. Finally, we also find that net IG support is positively associated with legislative voting.